# UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

Defendants.

ABU DHABI COMMERCIAL BANK, et al.,

Plaintiffs,

Vs.

MORGAN STANLEY & CO. Inc., et al.,

X 08 Civ. No 7508 (SAS)

ECF Case

:

ECF Case

EXPERT REPORT OF MICHAEL A. GOLDSTEIN, Ph.D.

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### I. QUALIFICATIONS

- 1. I am a Professor of Finance at Babson College where I hold the Donald P. Babson Chair in Applied Investments. Currently, I am Chair of the Finance Department at Babson College and, in that capacity, serve as the Director of the Stephen D. Cutler Center for Investments and Finance, a research and education center dedicated to the study and teaching of investments and capital markets. Previously, I served as the Faculty Director of the Stephen D. Cutler Center for Investments and Finance, held the Natalie Taylor Senior Term Chair, was designated a Babson Faculty Scholar, and before that held the Joseph Winn Term Chair.
- 2. I am an Honorary Professor at The Queen's University of Belfast (United Kingdom).
- 3. I have served as a Visiting Professor at Trinity College Dublin (Ireland) and at Boston College.
- 4. Prior to my joining the faculty at Babson College, I was a faculty member at the University of Colorado at Boulder where I taught finance.
- 5. I have taught a variety of courses at the undergraduate, MBA, masters in finance, and doctoral levels, including, but not limited to, financial markets, corporate finance, valuation, financial institution management, and real estate. I have taught doctoral courses in financial institutions and market microstructure. I have served on dissertation committees at the University of Colorado, Brandeis University, and The Fletcher School of Law and Diplomacy at Tufts University. I have also taught in a variety of executive education programs.
- 6. I have a Ph.D. in Finance, a Master of Arts in Finance, a Master of Business Administration with a dual concentration in Finance and Management, and a Bachelor of Science in Economics with a concentration in Finance from The Wharton School at the University of Pennsylvania.
- 7. I have published extensively in the field of finance. My papers have been published in major finance academic journals, including *The Journal of Finance, The Journal of Financial Economics, The Review of Financial Studies, The Journal of Financial*

- and Quantitative Analysis, The Journal of Financial Markets, The Journal of Corporate Finance, The Financial Review, and Real Estate Economics.
- 8. I am currently an Associate Editor for *Financial Management* and also *The Financial Review* and have served as a referee for numerous journals. I also serve on the Editorial Board of *International Review of Applied Financial Issues and Economics*. I am and have previously been a Director of the Eastern Finance Association. I have been on program committees and have served as a program track chair for major finance conferences. I have presented my research at numerous conferences worldwide and have thrice been awarded the "Best Paper in Market Microstructure" at major conferences.
- 9. I currently serve as Chair of the Economic Advisory Committee of the Financial Industry Regulatory Authority (FINRA). I am also a former Chair of the Nasdaq Economic Advisory Board, and was the Visiting Economist at the New York Stock Exchange (NYSE). I have appeared on two roundtables at the U.S. Securities and Exchange Commission. Previously, I worked in the investment banking division of Merrill Lynch Capital Markets and passed my Series 7 exam.
- 10. A detailed summary of my qualifications is provided on my curriculum vitae, which is attached as Appendix MG-1.
- 11. In addition to my teaching, research, and academic community responsibilities, I practice as a financial consultant. Appendix MG-2 presents a list of my testimonies over the past four years.
- 12. In accordance with recognized professional ethics, my professional fees for this service are not contingent upon the opinions expressed herein. My services in this matter are being compensated at the rate of \$750 per hour. Others working under my direction at are being compensated at hourly rates in the range of \$210 to \$550. I have no present or intended financial interest in the outcome of this matter.

#### II. ASSIGNMENT

- 13. I have been asked by counsel for Plaintiffs<sup>1</sup> to evaluate whether or not the alleged misrepresentations by Defendants (see below) caused the losses suffered by Plaintiffs on their investments in Cheyne SIV PLC ("Cheyne SIV").<sup>2</sup> I have also been asked to provide an appropriate estimate of such loss or damage if I find Defendants' misrepresentations caused the losses suffered by Plaintiffs.
- 14. This report presents my methodology, findings, and conclusions. I may revise my analyses and conclusions if additional relevant information becomes available.
- 15. The documents I have relied upon to form my conclusions are identified in this report and Appendix MG-3.

#### III. SUMMARY OF CONCLUSIONS

- 16. Plaintiffs allege that the Defendants provided false and misleading rating information on the Cheyne SIV senior notes and mezzanine capital notes ("MCN") (collectively the "Rated Notes"). The alleged false ratings were A-1+/P-1 on commercial paper ("CP"), AAA/Aaa on medium term notes ("MTN") and A/A3 on MCNs. These alleged false ratings signified safe, secure and reliable investments with an extremely low probability default, and a high likelihood of full recovery even in the extraordinary event of a default. Plaintiffs allege that the credit risks associated with the Cheyne SIV's notes were materially greater than represented by the false ratings. Principally, Plaintiffs allege the false ratings concealed from Plaintiffs (1) the poor quality of the Cheyne SIV's assets, (2) the Cheyne SIV's insufficient structural protections and collateralization and (3) a flawed ratings process based upon insufficient and incorrect assumptions and methodologies. As a basis for my analyses, Plaintiffs' counsel has provided that I may assume the foregoing allegations made by Plaintiffs have been established.
- 17. After a careful review of the evidence (see Appendix MG-3) and based on the above assumptions, I find the following:

The Plaintiffs are listed in Table 6, Summary of Damages by Plaintiff, at the end of my report.

<sup>&</sup>lt;sup>2</sup> "SIV" is the acronym for "Structured Investment Vehicle".

- (a) The Plaintiffs suffered economic losses *i.e.*, a decrease in the amount of money returned to Plaintiffs over the course of the securitization, as a result of their investments in Cheyne SIV Rated Notes. The Plaintiffs' economic losses were directly caused by the materialization of the risks concealed by Defendants' alleged false ratings.
- (b) The Cheyne SIV entered "Enforcement" as a direct consequence of the marked fall in value of its Home Equity Loan Residential Mortgage Backed Securities ("HEL RMBS") and Structured Finance Collateralized Debt Obligations ("SF CDOs") (collectively the "subprime assets"). Had the subprime assets not devalued as much as they did, the SIV would not have failed the Major Capital Loss Test and entered enforcement on August 28, 2007.
- (c) The price declines on subprime assets that drove the Cheyne SIV into Enforcement occurred when the market began to realize that the ratings on subprime assets were not reflective of their true credit quality. These price declines were caused by a realization that credit quality was materially lower than had been represented and a materialization of the credit risks that had been concealed.
- (d) As a consequence of my findings in (a) through (c), the losses suffered by Plaintiffs were a direct and foreseeable result of the alleged misrepresentations.
- (e) The out of pocket losses suffered by Plaintiffs total \$473,693,595 excluding pre-judgment interest (i.e., unrecovered purchase price only), and currently total \$713,013,685 if one includes pre-judgment interest at the mandated 9 percent statutory rate for New York through October 17, 2012 net any post-default interest.

#### IV. BACKGROUND

#### A. THE ECONOMICS OF CHEYNE SIV

18. Cheyne SIV launched on August 3, 2005, and was marketed as a "unique investment opportunity" offering certain features designed to distinguish it from typical SIVs.<sup>4</sup> Most notably, it was able to invest in a wider range of highly rated

Enforcement was a specified state for the Cheyne SIV that was effectively intended to be an orderly wind-down of the structure (see Section I.C below).

April 2005 Presentation to Prospective Capital Note Investors (MS 000221699-21767).

- assets than was available to most existing SIVs. In fact, Cheyne was the first SIV that had approval from the rating agencies to invest in HEL RMBS.<sup>5</sup>
- 19. SIVs were similar to banks in that they funded the purchase of longer term assets with shorter-term liabilities. In traditional banking, liabilities are primarily composed of demand deposits. For a typical SIV, liabilities were composed of short-term asset-backed commercial paper (Senior debt), medium-term notes (Senior debt), Mezzanine Capital (Mezzanine debt), and junior capital notes (Junior debt). These liabilities were used to fund purchases of Asset Backed Securities ("ABS") and Collateralized Debt Obligations ("CDOs") that comprised the typical SIV portfolio. The difference between cash inflows from the portfolio assets and outflows to Senior and Mezzanine debt would be allocated between Junior capital and the payment of management fees. Due to the difference in duration between its Assets and Liabilities, a SIV effectively generated profits by exploiting the term structure of credit spreads. Figure 1 illustrates the structure of a typical SIV.

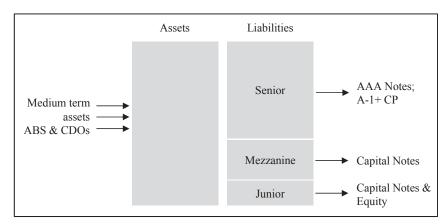


Figure 1. Balance Sheet of a typical SIV

20. Table 1 below summarizes some of the key features of Cheyne SIV at its launch. Of Cheyne SIV's initial \$3.4 billion portfolio, Table 1 indicates that the largest

April 2005 Presentation to Prospective Capital Note Investors (MS\_000221699-21767). See also Morgan Stanley's Memorandum to Standard and Poor's (MS\_000705537-5543) in which Morgan Stanley notes that: "Home Equity Loans (HELs) refer to first lien mortgages to US sub-prime borrowers."

Common Terms Agreement dated August 3, 2005 (MS\_000005067-5123 at 5078 and at 5112-3). See also Cheyne Finance PLC Indicative Capital Notes Investor Summary, June 2005 (MS\_000528522-542 at 534). Also see April 2005 Presentation to Prospective Capital Note Investors (MS\_0002221707) and S&P SIV criteria (MS\_000481001).

asset class was "Home Equity Loans" (i.e., HEL RMBS), at \$1.1 billion (33.5 percent).

Table 1. Breakdown of the Cheyne SIV balance sheet on August 12, 2005<sup>7</sup>

Category	MTM Hedge (\$mm)	WAL* ‡	P-1/ A-1+	AAA	AA	A	NR	Total Across Ratings	LIBOF Spread's (bps
Home Equity Loans	1,133.70	3.95	-	7.8%	18.8%	6.9%	-	33.5%	52.08
Large Loan	407.94	1.61	-	9.3%	2.8%	-	-	12.1%	19.02
Monoline Wrapped Global RMBS	378.32	2.77	-	11.2%	-	-	-	11.2%	21.83
CLOs	361.77	6.58	-	8.9%	1.2%	0.6%	-	10.7%	30.94
Sallie Mae Student Loans	344.47	6.92	-	10.2%	-	-	-	10.2%	8.43
Credit Cards	256.82	6.54	-	7.6%	-	-	-	7.6%	8.16
Prime RMBS	200.87	3.75	-	5.2%	0.5%	0.2%	-	5.9%	19.31
Conduit	58.05	5.50	-	1.7%	-	-	-	1.7%	27.90
Other CMBS	55.38	5.72	-	1.6%	-	-	-	1.6%	39.54
Non Sallie Mae Student Loans	50.09	6.97	-	1.5%	-	-	-	1.5%	9.00
Other Corporate ABS	49.76	6.52	-	1.5%	-	-	-	1.5%	12.00
Structured Finance CDOs	35.12	5.58	-	1.0%	-	-	-	1.0%	29.00
Single Property	30.09	1.59	-	0.9%	-	-	-	0.9%	21.00
Non-Prime RMBS	18.01	0.85	-	0.5%	-	-	-	0.5%	9.00
Total*	3,380.37	4.42	0.0%	68.9%	23.3%	7.8%	-	100%	30.12
LIABILITIES									
Catagony	MTM Hedge	WAL* ‡	P-1/ A-1+	AAA	AA	A	NR	Total Across	LIBOI Spread
Category	(\$11111)	WAL	A-1+	AAA	AA	А	NK	Ratings	(bps
U.S. Commercial Paper (Senior)	2,754.40	0.26	81.2%	-	-	-	-	81.2%	(1.00
U.S. Medium Term Notes (Senior)	324.89	1.03	-	9.6%	-	-	-	9.6%	0.77
Mezzanine Capital Notes (Junior)	273.81	5.62	-	-	-	8.1%	-	8.1%	101.52
Junior Capital Notes (Junior)	41.06	10.10	-	-	-	-	1.2%	1.2%	-
Senior Debt*	3,079.29	0.31	81.2%	9.6%	-	-	-	90.7%	(0.81
Net Spread (Assets - Senior Debt)			-						30.93

21. Table 1 identifies an expected weighted cash inflow of about LIBOR + 30.12 basis points ("bps") and a weighted average cost of funding for Senior debt of LIBOR – 0.81 bps, producing a narrow net spread of about 30.93 bps at Cheyne SIV's

Some values in the WAL and spread calculations differ by small amounts from the weekly report, apparently due to rounding errors. "MTM Hedge" (i.e., mark-to-market hedge) represents the reported market value of the assets in that class.

- launch.<sup>8, 9</sup> In more general economic terms, these inflows and outflow reflect the differing returns of the SIV's assets and senior liabilities.
- 22. As with any business entity, the capital structure of the SIV allocated the risks and returns from its underlying assets to its Senior, Mezzanine, and Junior Notes. Since Cheyne SIV's assets were themselves debt instruments ABS and CDOs the portfolio assets' risks and returns were defined primarily by: i) yield, ii) probability of default, and iii) other terms of the underlying ABS and CDOs (e.g., fixed versus floating coupon, maturity, etc.). The risks that would flow to the SIV's Senior (including Asset Backed Commercial Paper "ABCP" and MCNs) and Junior obligations would be determined by both the risk of the underlying portfolio assets and the amount of "leverage" in the SIV that is, the ratio of Senior debt to Junior obligations.
- 23. Leverage amplifies the risks that flow from underlying assets to the Junior debt obligations. When leverage is high, there is potential for these risks to migrate up to the Senior debt. Thus, high leverage is generally only possible when holding a lower risk asset portfolio. Moreover, given the risk and returns on the asset portfolio, profitability is increased by lowering the cost of capital on Senior debt. Lowering costs requires lowering risks that flow to the Senior debt by a combination of appropriate leverage and on-going mechanisms to protect the value of Senior debt. Economic viability of the SIV therefore required a proper balancing of these factors, while pursuing the highest yield possible on the asset side and lowest yield possible on debt side. The net spread in Table 1 between the cost of Senior debt and expected returns on assets would have been reduced had the ratio of Senior debt to non-Senior debt been reduced, or had the costs of Senior debt been higher.

An internal Morgan Stanley email exchange dated June 29, 2005 indicates an expected asset spread of 30-31 basis points in the target portfolio (S&P-ADCB 0163278-82).

The net spread differs slightly from the 27.43 bps reported in the August 12, 2005 S&P weekly ratings report, likely due to small differences in the asset spreads between the data from Bloomberg (used in Table 2) and that used to generate the ratings reports.

24. ABS and CDO assets were (and remain) complex instruments that "sliced and diced" risks in ways that were hard for investors to track.<sup>10</sup>

This nesting or interlinking of securities, structures, and derivatives resulted in a loss of information and ultimately in a loss of confidence since, as a practical matter, looking through to the underlying mortgages and modeling the different levels of structure was not possible. And while this interlinking enabled the risk to be spread among many capital market participants, it resulted in a loss of transparency as to where these risks ultimately ended up.

- 25. Rating agencies used their expertise and access to non-public information to provide credit ratings. Credit ratings are meant to give a good indication of credit quality and are used by investors to evaluate the risks of RMBS and SIVs. 11, 12 Credit ratings were key inputs in determining the yields demanded by investors on ABS, CDO, and SIV notes. 13
- 26. As noted earlier, high leverage increases the likelihood that risks will migrate to Senior debt holders. The credit quality of Cheyne SIV's debt obligations would therefore be highly dependent on its initial structuring, as well as its investment policy and mechanisms for managing the ongoing risks to different layers of debt.

Gorton, Gary. 2008. "The Panic of 2007," Prepared for the Federal Reserve Bank of Kansas City, Jackson Hole Conference, August, at p. 3.

James C. Van Horne, *Financial Market Rates & Flows*, 4<sup>th</sup> ed., Prentice Hall-New Jersey (1994), at p.153: "For the typical investor, risk is judged not by a subjectively formulated probability distribution of possible returns, but in terms of the credit rating assigned to the bond by investment agencies."

See Marian Micu, Eli M Remolona, and Philip D. Woodridge, "The price impact of rating announcements: evidence from the credit default swap market", Bank of International Settlements, BIS Quarterly Review, June 2004, p. 5: " ... credit ratings do convey information to market participants."

See United States. Securities and Exchange Commission 2003 Report on the Role and Function of Credit Rating Agencies in the Operation of the Securities Markets: As Required by Section 702(b) of the Sarbanes-Oxley Act of 2002, pages 19 and 38; Crouhy, M., Jarrow, A., and Turnbull, S., The Subprime Credit Crisis of 2007 Journal of Derivatives 16.1 (Fall 2008), at 85 ("Investors in complex credit products had considerably less information at their disposal to assess the underlying credit quality of the assets they held in their portfolios than the originators. As a result, these end-investors often came to rely heavily on the risk assessments of rating agencies."); Ex, 688, Testimony of Raymond W. McDaniel, Chairman and Chief Executive Officer Moody's Corporation before the United States House of Representatives Subcommittee on Capital Markets, Insurance and Government-Sponsored Enterprises, September 30, 2009, at 7.("Unlike in the corporate market, where investors and other market participants can reasonably develop their own informed opinions based on publicly available information, in the structured finance market, there is insufficient public information to do so... In the absence of sufficient data, investors are unable to conduct their own analysis and develop their own independent views about potential or existing investments.").

The ratings assigned by S&P and Moody's to these layers of Cheyne SIV's debt – specifically to its Senior debt and MCNs – were represented as reflecting their true credit quality based on these factors. As noted earlier, I have been asked to assume for the purposes of my analysis that S&P and Moody's ratings were inflated to conceal Cheyne SIV's true credit quality including its true vulnerability to housing prices.<sup>14</sup>

#### B. CHEYNE SIV'S CREDIT TRIGGERS

- 27. Given the leveraged nature of a SIV, certain covenants (i.e., triggers) must be built into the structure to protect the credit quality of the senior obligations on an ongoing basis. An important element in protecting Senior debt capital is in maintaining a sufficient "buffer" to absorb shocks to the value of the SIVs balance sheet. As noted above, the size of buffer depends on the riskiness of the assets on the balance sheet. Balance appropriate sheets with less volatile cash flow assets can manage with relatively small buffers there is much less likelihood of a negative shock eating through the Junior capital and reaching into the value of Senior debt and MCNs.
- 28. Cheyne employed ten daily capital tests that were supposed to ensure that the levels of capital remained consistent with the desired ratings. Failure under a subset of tests known as "Minor Capital Tests" would force Cheyne to operate in a "Restricted Investments" mode where Cheyne was required to limit new investments to high quality investments. Failure to comply with a subset of tests known as "Major Capital Tests" would put Cheyne into a Restricted Funding state, in which Cheyne could not issue any new Senior debt. Most notably, if Cheyne breached a specific Major Capital Test, the "Major Capital Loss Test", it would

Both on the HEL RMBS and SF CDO assets that would ultimately be held by Cheyne, and the debt that was issued by Cheyne SIV.

<sup>&</sup>lt;sup>15</sup> Moody's Operating Manual, pp. 51-52 (Z0380198 – 311).

See Clauses 6-7 and Schedule 8 of "Investment and Funding Management Agreement", August 3, 2005 (MS 000005124-82 at MS 000005132-5 and MS 000005169-72).

enter a state of "Enforcement".<sup>17</sup> Under Enforcement, Cheyne was to begin an orderly liquidation of its assets to start redeeming its Senior debt obligations as they became due – Enforcement was effectively the orderly unwinding/shutting down of the SIV.<sup>18</sup> Note that the Major Capital Loss Test is the only Capital Test that can trigger enforcement.

- 29. The Major Capital Loss Test enforced a minimum buffer to protect Cheyne SIV's Senior debt holders. Specifically, Cheyne was required to maintain an adjusted Net Asset Value (NAV)<sup>19</sup> defined as the difference between the market value of Cheyne SIV's assets and the market value of its senior debt greater than 50 percent of the par amount of the MCN and Junior Capital Notes. Notice that the NAV effectively measures the market value of Cheyne SIV's MCN and Junior obligations. Thus, the Major Capital Loss Test would be triggered when the market value of the MCN and Junior obligations fell below half of their originally invested capital.
- 30. The test conditions were monitored by S&P and Moody's, who were provided weekly reports from Cheyne SIV performing the required tests and providing data to support the test results.

#### C. CHEYNE SIV'S DETERIORATION AND ULTIMATE LIQUIDATION

31. After material deterioration of its NAV in July and August 2007, Cheyne SIV failed to roll its ABCP on August 5, 2007. By August 20, 2007 it had breached the Minor Capital Loss Test.<sup>20</sup> It formally breached its Major Capital Loss Test on

Operating Manual For Cheyne Finance PLC And Cheyne Finance Capital Notes LLC And Cheyne Finance LLC (Z0380219) at pp. 22 and 51. See also the definition for Enforcement-Event in "Common Terms Agreement", August 3, 2005 (MS 000005067-5123 at MS 000005079-80).

<sup>&</sup>quot;Investment and Funding Management Agreement", August 3, 2005 at Schedule 5, (MS-000005124-5182 at MS\_000005165), "Investment Liquidation Rules".

NAV is Total Portfolio Value minus the notional value of the Senior Funding (which includes Senior Notes, any drawn down liquidity facilities and repos) minus any breakage costs on liquidity facilities). Adjusted NAV equals Net Asset Value plus the market value of any CDS underlying a synthetic investment, (such market value which may be amended for certain CDS) (MS\_000418549).

<sup>&</sup>lt;sup>20</sup> BNYM10157453

August 28, 2007 and entered Enforcement.<sup>21</sup> On that same day S&P downgraded Cheyne SIV's CPs from A-1 to A-2, MTNs from AAA to A-, and MCNs from A to B-.<sup>22</sup> A day later, Moody's placed Cheyne SIV's Mezzanine Capital Notes and Combination Capital Notes on review for possible downgrade.<sup>23</sup>

- 32. While Cheyne SIV was liquidating its assets under enforcement, their "marked" value continued to deteriorate causing Cheyne SIV's estimated NAV to continue to fall.<sup>24</sup> By September 4, 2007, Cheyne SIV had entered receivership, and on October 17, 2007, Cheyne had become insolvent.<sup>25</sup> Over the course of the next 11 months, Deloitte (as receiver) arranged for the restructuring of Cheyne SIV, which was ultimately conducted by Goldman Sachs.<sup>26</sup> Goldman arranged for an auction of Cheyne SIV's collateral assets to both value and liquidate its remaining assets. Bids were received from 11 dealers and Cheyne SIV's remaining assets were ultimately liquidated on July 23, 2008 at 43.9 cents on the dollar.<sup>27</sup>
- 33. Prior to the auction, Cheyne SIV's Senior debt holders were offered the option to either receive cash from the proceeds or receive compensation in the form of newly issued "Gryphon" notes against the remaining assets. Gryphon Funding Limited ("Gryphon") was a newly formed Goldman sponsored entity created as the restructured vehicle. Goldman purchased Cheyne SIV's remaining assets and these were ultimately rolled into Gryphon. <sup>28, 29</sup>

<sup>&</sup>lt;sup>21</sup> Z1261906

<sup>&</sup>lt;sup>22</sup> Z1261906

<sup>&</sup>lt;sup>23</sup> Z1043099

Morgan Stanley was among banks that provided price marks to help estimate value for each asset in Cheyne SIV's portfolio. These bids were used to "mark" the value of the assets for calculation of the NAV.

<sup>&</sup>lt;sup>25</sup> BNYM00040622-8

See "Gryphon Funding Limited, Offer to Exchange", June 17, 2008 (CMA0000986-1295) (Summary & Restructuring Agreement at CMA0000997 and CMA0001095). Notice at Z095843.

<sup>&</sup>lt;sup>27</sup> Z0989159 and MDYS ADCB 1112249)

See "Gryphon Funding Limited, Offer to Exchange", June 17, 2008 (CMA0000986-1295), Summary & Restructuring Agreement at CMA0000997 and CMA0001095 ("The Gryphon Offers are not part of the Receivership or the Receivership Process. None of the SIV Portfolio plc (in receivership), Cheyne Finance LLC or the Receivers (a) have any role whatsoever in, and are not in any way affiliated with or responsible for, the issuer or the Gryphon Offers, (b) have approved, endorsed, structured or otherwise taken responsibility for the Gryphon Offers, (c) are providing any Senior Creditor with any legal, accounting, business, tax or other advice in connection with the Gryphon

#### V. LOSS CAUSATION ANALYSES

#### A. ASSIGNMENT

- 34. I have been asked to evaluate whether the losses to Plaintiffs were a direct and foreseeable result of the alleged false ratings.
- 35. Counsel for Plaintiffs has instructed me that for purposes of this analysis "causation" is interpreted under a "materialization of risk" (legal) standard. For my materialization of risk analysis, I understand that this requires establishing that the Cheyne SIV entered enforcement and Plaintiffs suffered losses as a result of the materialization of the risks concealed by the alleged false ratings.

#### B. KEY EVENTS LEADING INTO SUMMER 2007

36. In late 2006 the U.S. housing market began to slow. The Case-Shiller 20 City Composite Index for Housing prices had more than doubled between January 2000 and its peak in April 2006 at 206.64 (see Figure 2 below). However, 2006 saw general flattening and even a mild fall in the index – dropping to 203.41 by December. Housing prices started declining faster into 2007, and the index was sitting at 197.04 by July of 2007. Even with this fall, the index was still about 3 percent higher than it was two years earlier in July 2005 when the index was at 191.39.

Offers, or (d) accepts any responsibility for the accuracy, adequacy or completeness of any information contained in this Offer to Exchange or Sell.") and "Presentation to Senior Creditors of SIV Portfolio Plc" July 1, 2008 CMA0001296-308.

A more detailed timeline of some key events relating to Cheyne SIV is presented in Appendix MG-4. The index grew from 100.59 on January 2000 to 206.64 on April 2006 (105.4 percent growth between January 2000 to April 2006). Standard and Poor's Case-Schiller 20 City Composite Index (SPCS20RSA) measures the average change in single-family home prices in 20 major metropolitan areas. (See http://www.standardandpoors.com/indices/).

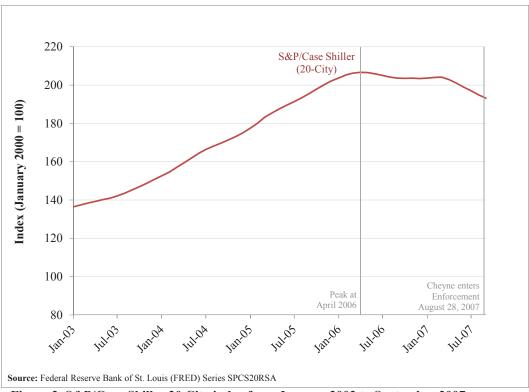


Figure 2. S&P/Case-Shiller 20 City index from January 2003 to September 2007

37. The nature of subprime mortgages makes them particularly vulnerable to such slow-downs. By design, subprime mortgages are loans to higher risk homeowners. To make such loans economically viable, they were structured so as to help lenders take advantage of home price appreciation:<sup>31</sup>

While the interest rate on a mortgage can be set to price the risk, such a rate is not likely affordable for these [subprime] borrowers. So, the challenge was (and remains) to find a way to lend to such borrowers. The basic idea of a subprime loan recognizes that the dominant form of wealth of low-income households is potentially their home equity. If borrowers can lend to these households for a short time period, two or three years, at a high, but affordable interest rate, and equity is built up in their homes, then the mortgage can be refinanced with a lower loan-to-value ratio, reflecting the embedded price appreciation. So, as detailed later, the mortgages were structured so that subprime lenders effectively have an (implicit) option on house prices. After the initial period of two or three years, there is a step-up interest rate, such that borrowers basically must refinance and the lender has the option to provide a new mortgage or not, depending on whether the house has increased in value.

Gorton, Gary. 2008. "The Panic of 2007," Prepared for the Federal Reserve Bank of Kansas City, Jackson Hole Conference, August, at p. 7.

Lenders are long real estate, and are only safe if they believe that house prices will go up.

38. The flattening of house prices placed a strain on the model that had supported subprime lending up to 2006. At the same time, interest rates had been steadily rising from December 2004 through the middle of 2006 (see Figure 3 below). The 1-year Adjustable Rate Mortgage ("ARM") index, which can be used as a proxy for trends in the 3 to 5 year ARMs that were typical of subprime mortgages,<sup>32</sup> had risen from an average of about 3.75 percent in 2003 to 5.2 percent by the end of January of 2006.<sup>33</sup>

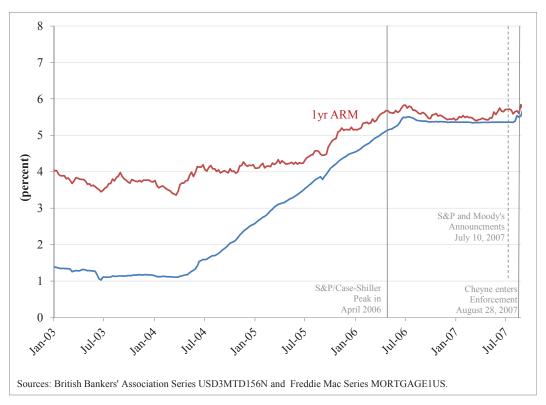


Figure 3. The 1-year ARM and LIBOR 3mo USD rates had been rising from the end of 2004 through 2006. These were important interest rates in the subprime market, given its shorter term mortgage arrangements and the tying of floating coupons on HEL RMBS to LIBOR rates.

Orouhy, M. G., Jarrow, R. A., and Turnbull, S. M. 2008. "The subprime credit crisis of 07," *Journal of Derivatives*, at p. 5 discusses origination in 2005 and 2006. Gorton, Gary. 2008. "The Panic of 2007," Prepared for the Federal Reserve Bank of Kansas City, Jackson Hole Conference, August, at pp. 12-13.

Freddie Mac Series MORTGAGEUS from the Federal Reserve Economic Data ("FRED").

- 39. Together, these factors would cause strain on cash inflows supporting RMBS. On the asset side of subprime RMBS, a flattening or decline in home prices would stop supporting the favorable loan-to-asset value ratios that had played an important role in the ability of subprime borrowers to re-finance their typically shorter term mortgages. At the same time, increases in interest rates had added further strain to subprime loan refinancing applications with mortgage payments jumping at least 30 percent for subprime borrowers. The consequence of these two factors was increased delinquencies/delayed payments and defaults/foreclosures on subprime mortgages.
- 40. Figure 4 below tracks a weighted-average of delinquency rates for HEL RMBS assets in Cheyne SIV's portfolio.<sup>37</sup> Delinquencies in each of the 30-, 60-, and 90-day categories were fairly steady or slightly rising from 2005 to 2006, leading to slowly rising delinquency rates at the 90+ days category. In 2006, the rates in each of the categories jumped to a new and stable level, causing a steeper growth in 90+day delinquencies. This increased steady rise runs from the beginning of 2006 at about 7 percent, and rises to over 30 percent by 2008. Note that at the end of 2006, the delinquency rate for prime fixed rate mortgages in the U.S. was 2.57 percent and 13.33 percent for subprime.<sup>38</sup>

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Gorton, Gary. 2008. "The Panic of 2007," Prepared for the Federal Reserve Bank of Kansas City, Jackson Hole Conference, August, at p. 12. See also Mortgage resets: Record bill coming due, CNN Money, August 13, 2007.

As of June 2007, over \$1 trillion in recent ARM mortgages were expected to reset by the end of the year (CNN Money.com, *When bad loans get worse*, June 21, 2007).

Report and Recommendations by the Majority Staff of the Joint Economic Committee, *The Subprime Lending Crisis - The Economic Impact on Wealth, Property Values and Tax Revenues, and How We Got Here*, October 2007, at p. 2. A more general discussion of the role of resetting above the so-called "teaser rates" for subprime borrowers is provided in Gorton, G. (2008), *The Panic of 2007*, Prepared for the Federal Reserve Bank of Kansas City, Jackson Hole Conference 2008, at pp.12-13.

In this figure, weights were determined by the collateral principal balances in the underlying mortgage pools associated with the HEL RMBS tranches held in the Cheyne portfolio.

Delinquencies and Foreclosures Increase in Latest MBA National Delinquency Survey, Mortgage Bankers Association, Press Release, March 13, 2007.

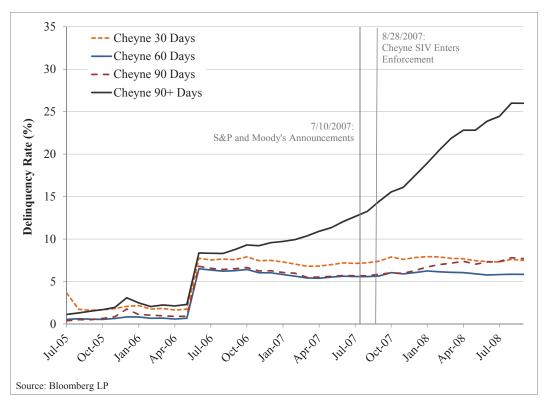


Figure 4. Index of delinquency rates for the underlying mortgage pools in Cheyne SIV's HEL RMBS portfolio. The index was constructed by weighting across the corresponding delinquency rates associated with the underlying HEL RMBS using remaining principal collateral as the basis of the weights. Note: these rates do not include Foreclosures, Bankruptcies and REOs.

- 41. For a structured entity (e.g., special purpose vehicle or SPV) issuing subprime mortgage backed securities (i.e., HEL RMBS and SF CDOs), these combined effects created strain on its asset portfolio and translated into increasingly at risk cash flow from which to pay investors the buyers of the RMBS notes.
- 42. On the liabilities side of the subprime RMBS balance sheet, the rise in interest rates had also added direct pressure since many asset backed securities specify floating-rate coupons tied to a base rate, such as the federal funds rate or LIBOR.<sup>39</sup> Increasing rates meant that obligations of the RMBS issuers were increasing at precisely the time that cash flow was at risk and shrinking.
- 43. While these factors would be expected to generate strain in lower rated subprime RMBS (i.e., HEL RMBS), a higher rating on RMBS was supposed to indicate it

<sup>&</sup>lt;sup>39</sup> For example, see "Home Equity ABS Basics," Nomura Fixed Income Research, November 1, 2004.

would be more than capable to withstand stresses of these kinds.<sup>40</sup> In fact, issues of the highest ratings (AAA/Aaa) should survive under economic situations analogous to the Great Depression.<sup>41</sup> However, while housing prices did fall later, by late summer 2007 the housing market had not, in fact, fallen very much, so at that time the drop in housing prices was only 3% down from its all-time high and still about 3% higher than its value two years earlier. More specifically, Moody's has described its Aaa rating to be associated with having a one in ten thousand probability of default and a Aa rating as having a one in one thousand probability of Ratings provide a relative measure of risk, where lower ratings are assigned to denote decreasing levels of credit worthiness. In fact, Moody's describes the purpose of its rating system to "provide investors with a simple system of gradation by which future relative creditworthiness of securities may be gauged."42, 43 The vulnerability of even highly rated subprime RMBS to a slowdown in the housing market is one of the risks that were allegedly concealed by the Defendants in these proceedings.

44. This perception of differential risks – and more specifically, that only the lower - rated tranches would be vulnerable – was supported by the ABX:HE indices at the time, which were key indicators of subprime RMBS health. Specifically, the ABX:HE is a family of indices introduced by *Markit* that is based on Credit Default

Also, it was known that housing could slow and many were commenting on the inevitability of it. For example, in S&P's Global Structured Finance 2006 Strategic Plan (finalized in June 2005), S&P acknowledged the housing bubble and considered it a potential risk to RMBS, CMBS and CDOs: "(CMBS, RMBS, & CDO5) Concerns that a "bubble" has developed in both residential and commercial real estate sectors. If this is the case and the "bubble" bursts then a large number of rating downgrades may occur. This could lead to high negative rating volatility and potential skepticism of the rating. In addition, surveillance resource needs would be needed to manage the scenario. This negative effect would trickle into CDOs as there are an increasing number of CDOs with RMBS and CMBS in them." (Ex. 501 at S&P-ADCB 2595538); See also Case, K. and Robert J. Shiller. 2003. "Is there a Bubble in the Housing Market? An Analysis," *Prepared for the Brookings Panel on Economic Activity, September 4-5*.

Investing in Asset-Backed Securities edited by Frank J. Fabozzi, CFA page 344; Ex. 689, "The Desired Meaning of Triple-A", February 12, 2008 (MDYS ADCB 9365924).

Moody's Rating Definitions, at http://www.moodys.com/Pages/amr002002.aspx; See also Standard and Poor's "Guide to Credit Rating Essentials", which states that "[r]atings denote a relative level of credit risk" http://img.en25.com/Web/StandardandPoors/SP\_CreditRatingsGuide.pdf.

See James C. Van Horne, *Financial Market Rates & Flows*, 4<sup>th</sup> ed., Prentice Hall-New Jersey (1994), at p.153.

Swap ("CDS") contracts written on a representative basket of subprime RMBS tranches matching the rating and vintage of mortgage origination. The ABX:HE reflects the market's perception of the likelihood of default on a representative basket of subprime RMBS. <sup>44</sup> The AAA to A rated indices (for all vintages) varied little from 2006 into 2007, even as default rates on the underlying subprime mortgage pools were rising. Only the lower rated BBB and BBB- indices indicated an increased – though marginal and stable – concern over default.

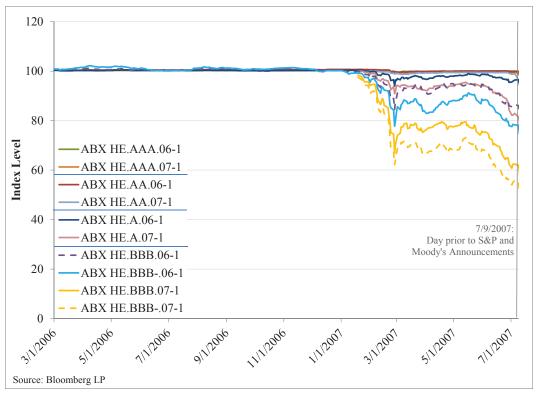


Figure 5. ABX:HE Index from March 1, 2006 through July 9, 2007 reflects CDS on HEL RMBS. Fall denotes increased perceived probability of default.

### C. CREDIT RATING AGENCY ANNOUNCEMENTS

45. On July 10, 2007 both Moody's and S&P put out a ratings bulletins concerning subprime RMBS (i.e., HEL RMBS). Specifically, Moody's downgraded 399 subprime RMBS securities originated in 2006, and they placed another 32 on

A discussion of what the ABX:HE specifically measures and its role is presented in Section V.2 below.

review for possible downgrade. Moody's cited the following reason for the action:<sup>45</sup>

The ratings were placed under review and downgraded based on higher than anticipated rates of delinquency in the underlying collateral compared to current credit enhancement levels.

46. Similarly, S&P placed 612 subprime RMBS on Creditwatch negative and announced a new ratings methodology that would be used to rate RMBS:<sup>46</sup>

Standard & Poor's Ratings Services said today it placed its credit ratings on 612 classes of residential mortgage-backed securities (RMBS) backed by U.S. subprime collateral on CreditWatch with negative implications (see list below)

The affected classes total approximately \$7.35 billion in rated securities, which represents 1.3% of the \$565.3 billion in U.S. subprime RMBS rated by Standard & Poor's between the fourth quarter of 2005 and the fourth quarter of 2006.

- 47. On the same day, CDOs with exposure to subprime RMBS were similarly placed under watch by S&P; Moody's did likewise on July 11, 2007.<sup>47</sup>
- 48. The impact on the ABX:HE indices was immediate, experiencing material drops ranging between 0.27 percent (AAA:2006:01) and 15.29 percent during the second week of July. By the end of August 2007, this had reached drops of 2.5 to 5.12 percent in the AAA indices, and 5.91 to 24.19 percent in the AA indices. The BBB and BBB- indices fared substantially worse, dropping 27.15 to 43.15 percent and 30.15 to 40.22 percent, respectively, by the end of August 2007 (see Figure 6 below).

Global Credit Research Rating Action (MASTR Asset MDYS ADCB 281550 Backed Securities Trust 2006-HE1), Moody's Investors Service, July 10, 2007 (MDYS ADCB 280550-70).

<sup>46</sup> RatingsDirect, Standard and Poor's, July 10, 2007 (S&P ADCB 0419797-9820).

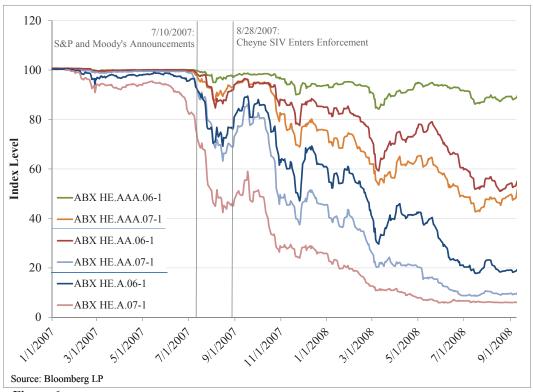


Figure 6

49. By May of 2008, over \$379 billion in subprime RMBS losses had been recorded by large financial institutions since the beginning of 2007. 48

Traditionally, investments holding AAA ratings have had a less than 1% probability of incurring defaults. But in 2007, the vast majority of RMBS and CDO securities with AAA ratings incurred substantial losses; some failed outright. Analysts have determined that over 90% of the AAA ratings given to subprime RMBS securities originated in 2006 and 2007 were later downgraded by the credit rating agencies to junk status. In the case of Long Beach, 75 out of 75 AAA rated Long Beach securities issued in 2006, were later downgraded to junk status, defaulted, or withdrawn. Investors and financial institutions holding the AAA rated securities lost significant value. Those widespread losses led, in turn, to a loss of investor confidence in the value of the AAA rating, in the holdings of major U.S. financial institutions, and even in the viability of U.S. financial markets.

Inaccurate AAA credit ratings introduced risk into the U.S. financial system and constituted a key cause of the financial crisis. In addition, the July mass downgrades, which were unprecedented in number and scope, precipitated the collapse of the RMBS and CDO secondary markets, and perhaps more than any other single event triggered the beginning of the

<sup>&</sup>lt;sup>48</sup> See "Subprime Losses Top \$379 Billion on Balance-Sheet Marks: Table," Bloomberg, May 19, 2008.

financial crisis. [United States Senate Permanent Subcommittee on Investigations (Levin and Coburn), *Wall Street and the Financial Crisis: Anatomy of a Financial Collapse*, April 13, 2011.]

50. By the time it entered Enforcement, Cheyne SIV held \$172.05 million in the 2006 Long Beach securities referenced in the Subcommittee report above.<sup>49</sup>

As the example suggests, the senior-most tranches of securitizations are likely to be of high credit quality. That is, they only experience losses under rare circumstances, when a large fraction of the loans in the underlying pool are hit with defaults. One reflection of this is that these senior-most tranches are typically rated AAA by the rating agencies. This in turn makes them attractive investments for institutional investors who are looking for safe places to put their money, but who are either unable or unwilling to expend the resources required to do loan-level due diligence. Such institutions may not have the expertise to evaluate individual applicants for auto loans, but given the reduction in credit risk associated with the process of pooling and tranching, may be comfortable buying the senior tranches of auto-loan securitizations even after relatively little investigative effort. [Stein, J.C. 2010. "Securitization, Shadow Banking, and Financial Fragility," *Working Paper*, May]

Prior to the credit crisis, CDOs were used to exploit market mispricings caused by the credit agencies misratings of structured debt. These mispricings were persistent due to both the complexity of the CDOs and the dysfunctional institutional and regulatory structures present in the economy. [Jarrow, R. 2011. "The Role of ABS, CDS and CDOs in the Credit Crisis and the Economy," *Working Paper*, September.]

# D. THE FALL IN HEL ASSET VALUES CAUSED CHEYNE SIV TO ENTER ENFORCEMENT

51. As noted in Section C above, the market's realization of significant problems with subprime RMBS in 2007 led to sector wide failure in the asset class. Although the two rating agencies downgraded and placed many HEL RMBS on CreditWatch Negative, Moody's suggested that SIVs would weather the crisis in the subprime assets market. On July 18, 2007 Moody's released a report titled: "SIVs: An Oasis of Calm in the Sub-prime Maelstrom." In the article, Moody's assured investors

S&P Portfolio Report for August 31, 2007 (S&P-ADCB 0037308). Cheyne SIV also held \$20.05 million in 2005 Long Beach HEL RMBS at the time it entered Enforcement.

that SIVs generally had only very small exposure to the subprime sector, that any such exposure was to high quality assets, and that SIVs had various protections in place that would "obviate[] the need to liquidate large buckets of assets at potentially the worst period in the life of the vehicle." Internally, Moody's was focused on Cheyne SIV because of its exposure to subprime mortgages.<sup>51</sup>

- 52. Similarly, despite continued deterioration in the subprime market, on August 15, 2007, S&P published an article "Structured Investment Vehicle Ratings Are Weathering the Current Market Disruptions," and affirmed ratings on 30 programs including the Cheyne SIV.<sup>52</sup> Morgan Stanley analysts "[could] not believe these morons would reaffirm in this market with mtm triggers threatening to wipe out the bonds." On August 20, 2007, Cheyne breached its Minor Capital Loss Test. Moody's commented internally that the "Market ha[d] singled out Cheyne as most likely SIV to come down given its portfolio HELs and CDOs."
- 53. The largest category of Cheyne SIV's assets were the HEL RMBS, which was larger than the next two categories combined by market value (see Table 2 below). The relatively large exposure of the Cheyne SIV to HEL RMBS and SF CDOs (see Table 2 below) which themselves held HEL RMBS<sup>55</sup> suggests that the revelation of subprime problems would have had a material impact on Cheyne SIV's balance sheet. It also makes the fall in HEL RMBS and SF CDOs in Cheyne SIV's portfolio prime candidates for causing Cheyne SIV's failure under the "Major Capital Loss Test" in August 2007. <sup>56</sup>

<sup>50</sup> MDYS ADCB 330404, MDYS ADCB 330407

<sup>52</sup> MS 000006106

<sup>&</sup>lt;sup>51</sup> Ex. 329

<sup>&</sup>lt;sup>53</sup> MS 000121701

<sup>&</sup>lt;sup>54</sup> BNMY10157453

For example, see Z0241770, Z0242376, Z0287198, Z0584047, Z0649536, Z0246698, Z0248914, Z0251025 and Z0286395. Also see Ex. 501 at S&P-ADCB 2595538, for CDO exposures in general.

<sup>56</sup> S&P notes that Cheyne was one of two vehicles with "significant above-average exposure to home equity and subprime assets." See "Structured Investment Vehicles: Under Stormy Skies, An Updated Look At The Weather," Standard &Poor's RatingsDirect, August 30. 2007, p. 2 (S&P-ADCB 0106162). In its September 5, 2007 Report on Cheyne, Moody's stated: "Cheyne Finance's portfolio has an RMBS exposure of 48%. Moody's rating action reflects the deterioration of the market value of Cheyne Finance's portfolio and the potential impact of crystallized losses following asset sales.

54. Table 2 below summarizes the evolution of Cheyne SIV's portfolio from its formation to the start of July 2007. As revealed by the table, Cheyne SIV's HEL RMBS holdings comprised 29.3 percent of the portfolio by value as of January 2007, while SF CDOs accounted for about 2 percent.

Table 2: Evolutin of cheyne SIV Portfolio

	8/12/2005		1/5/2	2007	7/6/2	007	
	Market Value	Percent of Total	Market Value	Percent of Total	Market Value	Percent of Total	
Home Equity Loans	1,133.70	34%	2,803.29	29%	2,572.84	24%	
Large Loan	407.94	12%	1,021.12	11%	1,049.59	10%	
Monoline Wrapped Global RMBS	378.32	11%	1,072.46	11%	1,249.38	12%	
CLOs	361.77	11%	1,208.50	13%	1,197.89	11%	
Sallie Mae Student Loans	344.47	10%	518.57	5%	518.05	5%	
Credit Cards	256.82	8%	378.33	4%	378.46	4%	
Prime RMBS	200.87	6%	971.33	10%	834.32	8%	
Conduit	58.05	2%	119.09	1%	167.02	2%	
Other CMBS	55.38	2%	294.79	3%	373.46	4%	
Non Sallie Mae Student Loans	50.09	1%	90.26	1%	90.28	1%	
Other Corporate ABS	49.76	1%	40.17	0%	40.16	0%	
Non-prime RMBS	18.01	1%	3.56	0%	56.41	1%	
Structured Finance CDOs	35.12	1%	220.38	2%	429.26	4%	
Single Property	30.09	1%	0.00	0%	0.00	0%	
Cash Equivalents	0.00	0%	146.51	2%	460.76	4%	
Other Global CDOs	0.00	0%	35.16	0%	34.98	0%	
Balance Sheet CDOs	0.00	0%	461.08	5%	746.84	7%	
Lease Backed	0.00	0%	31.30	0%	29.54	0%	
Other Global RMBS	0.00	0%	75.19	1%	266.15	3%	
HELOC	0.00	0%	81.34	1%	68.13	1%	
Total	3,380.37	100%	9,572.44	100%	10,563.51	100%	

55. Figure 7 below shows that the marks for the HEL RMBS and SF CDO portions of the Cheyne portfolio did markedly worse than the remaining portfolio in Cheyne SIV's asset holdings.<sup>57</sup> Moreover, much of this deterioration did not happen until July 2007.<sup>58</sup> The general trend observed pre-Enforcement suggests that

It is worth noting that the remaining portfolio includes the category "Prime RMBS", which does not deteriorate nearly as much as Cheyne SIV's HEL RMBS and SF CDO assets. Moreover, the deterioration of the Prime RMBS class is itself likely to be biased downward by the fact it includes Alt-A mortgage backed assets (Z1042443).

The Morgan Stanley HEL RMBS marks to Cheyne SIV performed particularly badly relative to other dealers in this period, deteriorating by over 16.5 percent on a weighted average basis. With the exception of HSBC, other dealer quotes only fell by 0 to 5.37 percent on average. HSBC's HEL RMBS marks fell by 15.86 percent on a weighted average basis.

deterioration in the HEL RMBS market caused material impairment to Cheyne SIV's NAV.

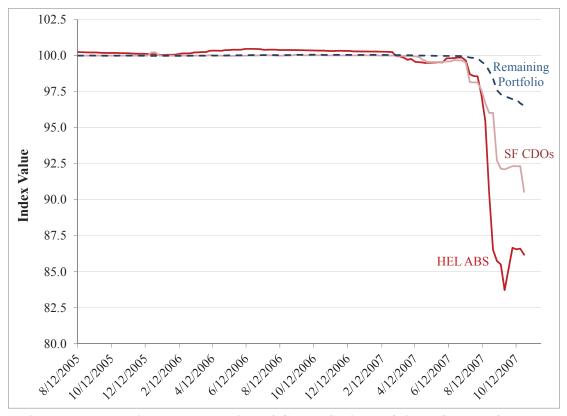


Figure 7. Equal-Weighted Value Indices of Cheyne SIV's Portfolio by Segment from Reported Marks. (Source: S&P Weekly Ratings Reports)

- 56. To examine the role that deterioration of HEL RMBS and SF CDOs played in the deterioration of Cheyne SIV, I first consider a simple analysis that shows the deterioration in Cheyne SIV's HEL RMBS and SF CDOs were so significant that it would have been difficult, if not impossible, for Cheyne to avoid triggering a failure under the Major Capital Loss Test without selling much of its HEL RMBS at the start of January 2007.
- 57. Figure 8 plots the cumulative losses that Cheyne's NAV would have to endure as of January 5, 2007 for it to enter Enforcement that is, the size of its buffer (the line labeled "Major Capital Loss Test Threshold at January 5, 2007"). Figure 8 also plots the performances of Cheyne SIV and the HEL RMBS and SF CDOs under a "holding" strategy from January 5, 2007 onward. That is, the additional lines plot the performance of Cheyne SIV's portfolio if the composition of the SIV portfolio

was held constant from January 5, 2007 – and all changes were due solely to price appreciation/depreciation in the underlying assets.<sup>59</sup>

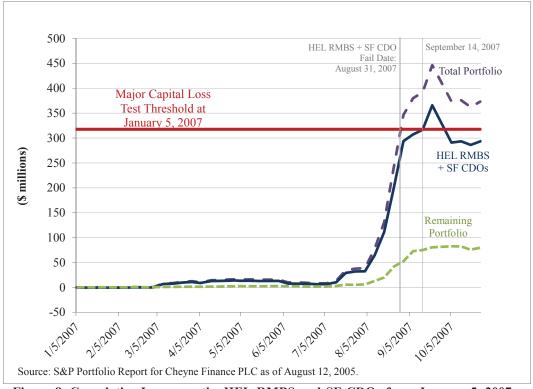


Figure 8. Cumulative Losses on the HEL RMBS and SF CDOs from January 5, 2007 would have triggered Enforcement on August 31, 2007 – holding composition constant.

- 58. As the chart reveals, the magnitude of losses on Cheyne SIV's HEL RMBS and SF CDO assets would become so large between July and August 2007 that alone they would have eroded Cheyne SIV's NAV to the point of Enforcement by August 31, 2007.
- 59. Figure 9 below repeats the same exercise as in Figure 8 but instead using a start date of July 6, 2007. Again, failure from the deterioration in HEL RMBS and SF CDOs alone leads to a failure of the Major Capital Loss Test.

<sup>&</sup>lt;sup>59</sup> This implicitly assumes that SIV notes continue to roll at similar costs of capital.

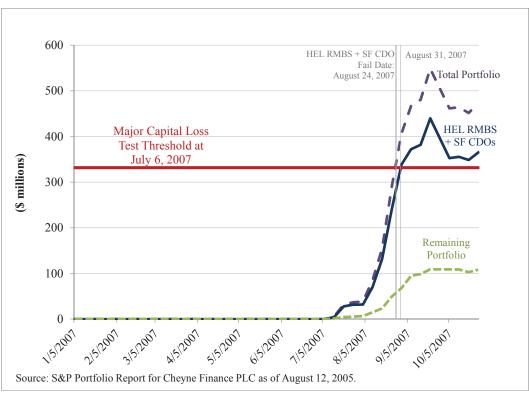


Figure 9. Cumulative Losses on the HEL RMBS and SF CDOs from July 6, 2007 alone were enough to trigger Enforcement - holding composition constant

- 60. These charts show that it was indeed the HEL RMBS and SF CDO assets that caused Cheyne to enter Enforcement by the end of August 2007. Consistent with these findings, the Defendants and other market participants attributed the Cheyne SIV's failure to materialization of credit problems in its poor-quality portfolio. On July 13, 2007, subordinated tranches for 37 deals owned by the Cheyne SIV had been downgraded or put on negative watch. 60 On July 20, Morgan Stanley analysts observed: "[I]f we had the assets at the bid side (this is a conservative number) they would fail the entire portfolio trigger for both the Minor and Major Test as well as the HEQ's would trigger outright if they came in at the bid side." 61
- 61. Internally Moody's also differentiated Cheyne from other SIV's because of its subprime holdings:

MS 000281111-2

July 20, 2007 email from Dudas to Rooney, Khadjavi and others (MS 001370797-98). Excel spreadsheet reflecting the analysis (MS 001370799).

"This is the first "traditional" SIV (i.e. a SIV which is not a SIV lite) that we place on review. However, unlike most – but not all – the other traditional SIVs, Cheyne has a large exposure to US RMBS (63%).." <sup>62</sup>

"[W]e should make it clear that Cheyne is unique in this sector for example, significant exposure to subprime." 63

"We are about to downgrade two SIVs (Axon and Cheyne). Axon, Cheyne and Rhinebridge (that we downgraded last Thursday) are *the only SIVs* with large exposure to RMBS or RMBS CDOs." (Emphasis added)<sup>64</sup>

62. On August 28, 2007, when Cheyne went into enforcement, S&P downgraded Cheyne SIV's MTNs six notches to A-, the CP two notches to A-2 and the MCNs ten notches to B- (below investment grade). In its August 30, 2007 Report on Cheyne, S&P stated that:<sup>65</sup>

Our rating actions on Cheyne, while unprecedented, reflect the fact that Cheyne was concentrated in those sectors of the real estate markets that are under the most dramatic price pressure.

# E. MATERIALIZATION OF THE ALLEGEDLY CONCEALED RISKS CAUSED HEL PRICE DECLINE

63. As evidenced above, Cheyne entered Enforcement as a direct consequence of the decline in marks (prices) on its HEL RMBS and SF CDO assets. It is therefore important to understand how the value of such assets are determined, and how much of the price decline in these assets can be attributed to the realization of the concealed risks as opposed to those that were generally understood by the market at the time.

<sup>&</sup>lt;sup>62</sup> Ex. 332

<sup>63</sup> Ex. 332

<sup>&</sup>lt;sup>64</sup> Ex. 595

Structured Investment Vehicles: Under Stormy Skies, An Updated Look At The Weather, Standard & Poor's, RatingsDirect, August 30, 2007, p. 4 (S&P-ADCB 0106162). See also S&P-ADCB 0018202, 8/29/09 RE: IMPORTANT: Cheyne q&a, "Our rating actions on Cheyne reflect[ed] the fact that market valuations of US high grade subprime securities, in which it was relatively heavily invested, ha[d] fallen to unprecedented levels."

## 1. Unique Features of HEL RMBS

- 64. At its core, this is a bond pricing problem, but there are important distinguishing features for subprime RMBS.
- 65. Bond pricing is founded on the concept of *present value* the value today of an (possibly) uncertain future payment. 66 The key risks for buyers of fixed income securities like fixed income bonds are: 67
  - 1. **Direct Interest Rate Risk:** Interest rates will change (rise), making the coupon received on the bond less attractive given current market rates thus reducing the value of the bond; and
  - 2. **Default Risk:** Defined as receiving payment less than what is prescribed under contract terms. Default risk includes both reduced payments and outright failure to pay. As discussed below, interest rates can also affect default risk in subprime RMBS securities through indirect channels.
- 66. For most senior rated notes in a typical RMBS (HEL and SF CDO), direct interest rate risk is minimized by the fact that such notes are issued at floating rates that is, the coupon paid on the note is tied to current market rates, such as LIBOR or the Fed funds rate. An example might be a coupon set at USD LIBOR 3mo + 25 basis points, so that as LIBOR changes, the payments from the ABS change in a similar manner.
- 67. The most important risk for a typical senior RMBS note is the risk of default. In RMBS securities, especially subprime HEL RMBS (and SF CDOs holding subprime), this is also much more complex than for typical corporate or sovereign debt. The unique structure of RMBS creates a direct link between interest rate movements and RMBS defaults of various kinds so even floating rate RMBS can be sensitive to interest rates through this secondary channel. Additionally, the

See, for example, James C. Van Horne. 1994. *Financial Market Rates & Flows*, 4<sup>th</sup> ed., New Jersey:Prentice Hall, at pp. 36-37; or Bodie. Z, Alex Kane, and Alan J. Marcus. 2009. *Investments*, 8<sup>th</sup> Ed., New York, NY:McGraw-Hill/Irwin, at p. 446.

Other risks include tax policy changes, etc. E.g., see Bodie, Kane and Marcus 2009, at p. 446.

value of RMBS is tied to the value of the underlying assets – residential housing – in ways not seen for corporate debt, and is particularly true for subprime RMBS.<sup>68</sup>

The securitization of subprime mortgages also had a unique design, reflecting the home price sensitivity of the mortgages, and involving a dynamic build-up of credit enhancement as the underlying mortgages refinanced, paying cash into the securitization. Rated tranches of subprime securitizations were sold into collateralized debt obligations, tranches of which were in turn sold to structured investment vehicles, and so on. This chain of linked structured securities depended on house prices, and the final location of these risks – the end investors – are not known.

As long as house prices appreciated, subprime mortgages could be refinanced, and the various structured securities linked to subprime mortgages were attractive investments.

#### 2. The ABX:HE Index and Risk of Default

68. The ABX:HE family of indices was started in 2006 to provide transparency and liquidity to the subprime RMBS CDS market. As noted earlier, it was a key indicator that investors turned to during the subprime crisis.<sup>69</sup>

While the location of the risks was unknown, market participants could, for the first time, express views about the value of subprime bonds, by buying or selling protection. In 2007 the ABX prices plummeted. The common knowledge created, in a volatile way, ended up with the demand for protection pushing ABX prices down.

69. Most investment banks and institutions based write-downs of their RMBS inventory at this time on the performance of the corresponding ABX index. <sup>70,71</sup>

Perhaps most important, with the global collapse of subprime mortgage-backed security trading during the recent financial crisis, many portfolio investors in these securities began using the more liquid ABX.HE index CDS prices as a benchmark for marking-to-market their trading portfolios of subprime securities.4 For example, the Swiss bank UBS AG wrote down its subprime mortgage investments by \$10 billion largely based on the ABX.HE index CDS

Gorton, Gary. 2008. "Information, Liquidity, and the (Ongoing) Panic of 2007," Prepared for AER Papers & Proceedings, 2009, at p. 2.

Gorton, Gary. 2008. "The Subprime Panic," Yale ICF Working Paper 08-25, September 30, at p. 1.

Stanton, R. and Nancy Wallace. 2011. "The Bear's Lair: Index Credit Default Swaps and the Subprime Mortgage Crisis," *The Review of Financial Studies*, at pp. 3251-3252.

Gorton, Gary. 2008. "The Panic of 2007," Prepared for the Federal Reserve Bank of Kansas City, Jackson Hole Conference, August, at p. 3.

(see UBS AG 6K financial statements). Both Morgan Stanley and Citigroup cited devaluations in the ABX.HE index CDS to justify their significant writedowns of subprime securities (see Ng et al., 2007). Most recently, in August 2010 Goldman submitted a nine- page memo to the Financial Crisis Inquiry Commission (see Goldman Sachs, 2010) describing how it used ABX.HE prices in 2007 and 2008 in setting the CDO prices it quoted when demanding over \$12 billion in collateral payments from the insurance firm AIG. Finally, in March 2008, the Division of Corporation Finance of the Securities and Exchange Commission sent public companies an illustrative letter with preparation guidelines for the Management's Discussion and Analysis (MD&A) statements required for Form 10-K quarterly reports. The letter suggested that:

"Regardless of how you have classified your assets and liabilities within the SFAS 157 hierarchy, if you have not already done so in your Form 10-K, consider providing the following additional information in your MD&A:

- A general description of the valuation techniques or models you used with regard to your material assets or liabilities. Consider describing any material changes you made during the reporting period to those techniques or models, why you made them, and, to the extent possible, the quantitative effect of those changes.
- To the extent material, a discussion of the extent to which, and how, you used or considered relevant market indices, for example ABX or CMBX, in applying the techniques or models you used to value your material assets or liabilities. Consider describing any material adjustments you made during the reporting period to the fair value of your assets or liabilities based on market indices and your reasons for making those adjustments . . . "
- 70. As shown in Figure 10 below, after Moody's and S&P's July 10, 2007 announcements the ABX index for AAA, AA and A HEL RMBS declined substantially, denoting an increased perceived probability of default in the market.

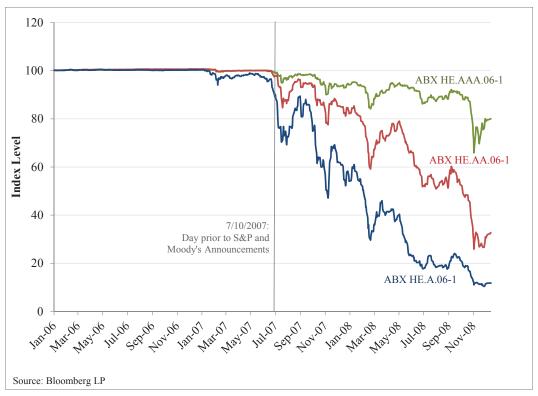


Figure 10. ABX:HE Index reflect CDS on HEL RMBS. Fall denotes increased perceived probability of default

71. The underlying credit metrics of the CDS tranches that index the ABX, such as the delinquency rates considered earlier for Cheyne, are similar to the Cheyne metrics considered earlier in the 2007 period. Figure 11 below plots a 90+ day delinquency rate index over time for AAA through A rated tranches of the ABX 2006:01 vintage, along with the Cheyne 90+ day index discussed earlier. As demonstrated in the figure, delinquency rates in this category converged together by around July 2007, and started separating towards the end of the year. Essentially, the constructed ABX credit index had started with lower rates in late 2005,<sup>72</sup> but these were growing marginally faster than the corresponding rates in Cheyne SIV's underlying HEL RMBS portfolio. Both rates start accelerating at the start of 2006, with the ABX version rising faster than Cheyne SIV's, which it overtakes in July 2007. Although the trajectory of this ABX credit metric rises at a faster rate than Cheyne SIV's, the two are generally rising together through the 2005 to 2008

Note, while the ABX:2006:01 itself starts in January 2006, the underlying HEL RMBS tranches were issued in the six months preceding, starting in 2005.

period. The correlation coefficient between 90+ day delinquencies in the mortgage pools underlying the ABX:HE AA 2006:01 index and Cheyne's portfolio between September 2005 and December 2008 is 0.9839.<sup>73</sup>

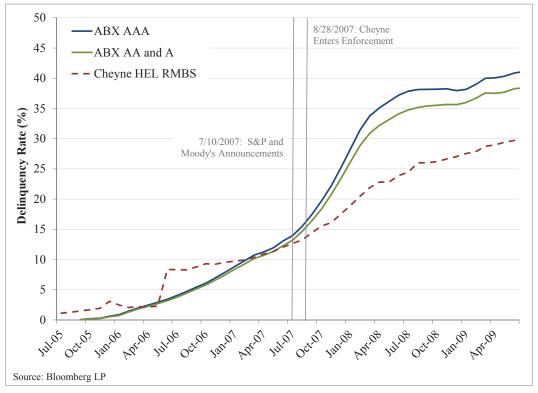


Figure 11. Evolution of 90+ day delinquencies in the underlying Cheyne HEL RMBS portfolio and 90+ day delinquencies in the HEL RMBS underlying the CDS tranches included in the ABX indices for 2006:01 vintage.

72. Data from the 30-, 60-, and 90- day rates paints a similar picture, and suggests that the ABX 2006:01 indices – when matched to ratings in Cheyne SIV's HEL RMBS portfolio – will be a good proxy for the market's perception of the true underlying credit risk in Cheyne SIV's HEL RMBS portfolio.

## 3. Event Study

73. The event study methodology is widely used as a method of analysis to measure the effect of some event or set of events on the value of an asset. As noted in Campbell, Lo, and MacKinlay (1997), "Event studies have a long history. Perhaps

The maximum a correlation coefficient can be is 1. Correlation coefficients range between -1 and 1, with 1 indicating perfect positive correlation.

the first published study is Dolley (1933)."<sup>74</sup> Event studies have been a primary methodology for analysis of event impacts on prices since the seminal works of Ball and Brown (1968) and Fama, Fisher, Jenson, and Roll (1969). The methodology arises because the impact of an event is immediately reflected in the value the market places on the asset. Thus, an event study attempts to measure an event's impact using asset price movements observed over a relatively short time period.<sup>75</sup> Event studies are a widely accepted method of analysis in many fields, including academia, law and economics, legal liability cases, among others.<sup>76</sup>

# a) Announcements by Moody's and S&P Caused a Jump in the Perceived Default Risk

74. The ABX:HE charts above strongly suggest that the Moody's and S&P announcements had a material impact on the perceived likelihood of default in HEL RMBS – resulting in large index drops across the different individual indices. Given the high liquidity of the ABX's underlying CDS, the significance of the announcements' impacts and causality can be statistically tested using event study methodology:<sup>77</sup>

Markit owns and administers the ABX.HE, which is a liquid, tradeable tool allowing investors to take positions on subprime mortgage-backed securities via CDS contracts. The index has become a benchmark for the performance of subprime RMBS. Its liquidity and standardization allows investors to

See Campbell, Lo, and MacKinlay. 1997. *The Econometrics of Financial Markets*, Princeton, NJ: University Press, at p. 149.

For further discussion, see Campbell, Lo, and MacKinlay (The Econometrics of Financial Markets, 1997, Princeton, New Jersey: University Press, pages 149-180). While that chapter focuses on equity event studies, the authors note on page 149 that "the methodology can be applied to debt securities with little modification." Note that the application on prices here is similar to event studies in corporate bond transparency work, where the event is a change in the information set which affects prices over the long run. See, for example, Michael Goldstein, Edith Hotchkiss, and Erik Sirri "Transparency and Liquidity: A Controlled Experiment on Corporate Bonds", The Review of Financial Studies, Vol. 20, No. 2, March 2007, 235-273; see also Michael Goldstein and Edith Hotchkiss, "Know When to Hold Them, Know When to Fold Them: Dealer Behavior in Highly Illiquid Risky Assets", working paper, Babson College.

See Campbell, Lo, and MacKinlay (The Econometrics of Financial Markets, 1997, Princeton, New Jersey: University Press, page 149.

See Markit website http://www.markit.com/en/products/data/indices/structured-finance-indices/abx/abx.page.

- accurately gauge market sentiment around the asset-class, and to take short or long positions accordingly.
- 75. Since the majority of Cheyne SIV's subprime assets were AA-rated going into 2007 (e.g., see Table 3 below for a breakdown of Cheyne SIV's HEL RMBS in January 2007). I focus on the behavior of the ABX AA 2006:01 index surrounding the event date July 10, 2007 (i.e., the date that S&P and Moody's made their announcements, with S&P specifically announcing a new methodology).

Table 3. Breakdown of HEL RMBS by S&P credit rating on January 5, 2007<sup>78</sup>

	Market Value (\$ millions)	Percent of Total
AAA	158.91	6%
AA	2,351.77	84%
A	300.93	11%
Total	2,811.61	100%

Source: S&P Portfolio Report for Cheyne Finance PLC as of January 5, 2007.

76. To test whether or not the rating agencies' announcements on July 10, 2007 had a statistically significant impact on the ABX AA 2006:01 index, I first generate daily returns ("ABX returns" or "abxret") from the ABX AA 2006:01 price index. A benchmark model for ABX returns is then estimated using ABX AAA 2006:01 index returns and ABX A 2006:01 index returns as explanatory variables (i.e., factors) in a regression framework. The model was estimated from January 2, 2006 through to July 10, 2007 (the event date) using a dummy variable (named "downgrades") to estimate the impact of the announcements on ABX returns on the

Numbers do not add to 100 percent due to rounding errors.

A similar analysis examining the impact of the rating agencies announcements on prices is presented in Appendix MG-5.

These return indices were similarly generated from the original corresponding ABX:HE price index data.

event date.<sup>81</sup> A summary of the model's performance is presented in Table 4 below.

Table 4. Results of event study to determine if the ratings agency announcements caused an abnormal fall in the ABX:HE AA 2006:01 index

Source	SS	df	MS			Number of obs	363
			_			F( 3, 359)	197.4
Model	7.7981E-05	3	0.000025994			Prob > F	0.000
Residual	4.7274E-05	359	1.3168E-07			R-squared	0.6226
						Adj R-squared	0.6194
Total	0.00012526	362	3.4601E-07			Root MSE	0.00036
abxaaret	Model Coef.		Std. Error	t	Prob>   t	[95% Conf.	Interval]
abxaaaret	0.5994647		0.0397863	15.07	0.000	0.5212212	0.677708
abxaret	0.0743025		0.0073004	10.18	0.000	0.0599456	0.088659
downgrades	-0.0020767		0.000385	-5.39	0.000	-0.0028339	-0.00132
_cons	5.65E-07		0.0000191	0.03	0.976	-0.000037	3.81E-05

77. The model has strong explanatory power with an R²-adjusted statistic of 0.6194, and t-statistics on the factor co-efficients are all strongly significant at more than a 99 percent confidence level (see "Prob > | t |"). These results suggest that prior to the rating agencies' announcements on July 10, 2007, these ABX:HE 2006:01 indices were generally well-related to one another and could be used to explain each other's movement. Notably, the "downgrades" coefficient is negative, at about -0.002, and is highly significant at beyond a 99 percent confidence level. That the coefficient is negative and so highly significant suggests a statistically significant abnormal return on the day of the rating agencies' announcements. That is, the announcements indeed had statistically significant (negative) impacts on the ABX AA 2006:01 index – which in turn suggests that the announcements caused a significant increase in the perceived risk of default on AA rated HEL RMBS of 2006:01 vintage.

That is, downgrades = 0 prior to July 10, 2007, and downgrades = 1 on July 10, 2007.

More precisely, it suggests that on July 10, 2007, perceptions of the probability of default on subprime AA rated assets from the 2006:01 vintage saw a statistically abnormal jump greater than could be explained by the drops seen in the AAA and A 2006:01 indices.

# b) The Fall in Cheyne SIV's HEL RMBS was Caused By the Rating Agency Revelations

- 78. The statistically significant deterioration of the ABX AA 2006:01 index following the July 10<sup>th</sup> announcements by Moody's and S&P (and in the relationships between the ABX:HE indices) draws a direct link between the alleged misrepresentations and a jump in the perceived default risk of HEL RMBS as a class. As noted earlier, probability of default is an important factor determining the value of any bond, HEL RMBS included. The jump in perceived default rates reflected by the rapid deterioration of the ABX:HE indices would therefore be expected to explain much, if not all, of the observed deterioration in Cheyne SIVs HEL RMBS value between July and August of 2007.
- 79. To estimate the impact of the sudden shift in perceived probability of default on Cheyne SIV's HEL portfolio, I consider a regression model to estimate the relationship between returns on Cheyne SIV's HEL RMBS portfolio and returns on the ABX:HE AA 2006:01 index, which captured the abrupt jump in perceived probability of default after the rating agencies' announcements. My model also includes proxies for other potential drivers of HEL RMBS value that were discussed above. Namely, I use the yield on 5-year U.S. Treasury Notes as a measure of pure interest rate movements (i.e., no measurable default risk), the difference between yields on Corporate AAA rated bonds and Corporate CCC (or below) rated bonds as a measure of changes in the price of default risk (e.g., changes in risk aversion), and the returns on Cheyne SIV's HEL RMBS portfolio that were generated from Cheyne SIV's bid price marks as reported in the "Weekly Rating Agency Reports" to S&P. As such, the entire analysis was performed using corresponding weekly data for the underlying explanatory factors.
- 80. The model was calibrated using an estimation window running through to October 26, 2007. An "event" dummy variable for the period July 13 through July 20<sup>th</sup> is included in the model to capture potential effects on the model structure itself, that

might have been also caused by the rating agencies' announcements.<sup>83</sup> We start in January 2006, since the ABX:HE indices only started in 2006. The results of the model are presented in Table 5 below.

Table 5. Results of HEL RMBS returns model

Source	SS	df MS			Number of obs	101
					F(5, 95)	25.65
Model	0.00422684	5 0.000845367			Prob > F	0.000
Residual	0.00313056	95 0.000032953			R-squared	0.5745
					Adj R-squared	0.5521
Total	0.00735739	100 0.000073574			Root MSE	0.00574
helret	Model Coef.	Std. Error	t	Prob>   t	[95% Conf.	Interval]
abxret	-0.69712	0.0704862	-9.89	0.000	-0.8370528	-0.557187
abxret2	-16.11249	1.755928	-9.18	0.000	-19.59845	-12.62654
rf_5yr	-0.0001104	0.0032705	-0.03	0.973	-0.0066031	0.0063823
aaa_ccc	-0.0000368	0.0001316	-0.28	0.780	-0.0002981	0.0002245
eventshort	-0.0112755	0.0041875	-2.69	0.008	-0.0195887	-0.002962
_cons	0.0082726	0.0397449	0.21	0.836	-0.0706311	0.0871762

- 81. The term "abxret2" represents the value of the ABX AA 2006:01 return squared. This squared term is included to capture potential non-linear elements in the relationship between credit risk and HEL RMBS returns, since default risks can be non-linearly connected to subprime RMBS returns. 84
- 82. The adjusted R-squared statistic shows a healthy fit of the model, at 0.5521.85 Moreover, the only coefficients that are statistically significant are those on the

July 13<sup>th</sup> is the first weekly report produced after the credit rating agencies' announcements. The impact of the announcement would show up in the changes between the July 6<sup>th</sup> report and the July 13<sup>th</sup> reports.

See, for example, Espinoza, R. and Miguel Segoviano, *Probabilities of Default and the Market Price of Risk in a Distressed Economy*, IMF Working Paper WP/11/75, 2011, at p. 9.

See Greene, William H. 1997. *Econometric Analysis*, 3<sup>rd</sup> Edition, New Jersey:Prentice-Hall, at p. 256 for example for a discussion of the value of R-squared. The text reads "Unfortunately there is no basis of comparison. In terms of the values one normally encounters in cross sections, an R<sup>2</sup> of 0.5 is relatively high... The point of this discussion is that whether a regression line provides a good fit to a body of data depends on the setting." Pindyck, Robert and Daniel L. Rubinfeld. 1998. *Econometric Models & Economic Forecasts*, 4<sup>th</sup> Edition, McGraw-Hill, Inc., provide another source for the discussion of the value of measured R-squared. Page 206 reads, "... good forecasts, on the other hand, may come from regression models that have relatively low R<sup>2</sup>'s and one or more insignificant regression coefficients."

ABX return terms, and on the event itself. These coefficients are highly statistically significant at levels beyond 99 percent confidence. The significance of the event dummy suggests that the relationship between returns on Cheyne SIV's subprime assets and the ABX index did "shift" a small amount, producing a small impact on returns in the new event window between July 13<sup>th</sup> and July 20<sup>th</sup>.

83. Figure 12 presents Cheyne SIV's actual HEL RMBS returns and the returns predicted by the regression model.

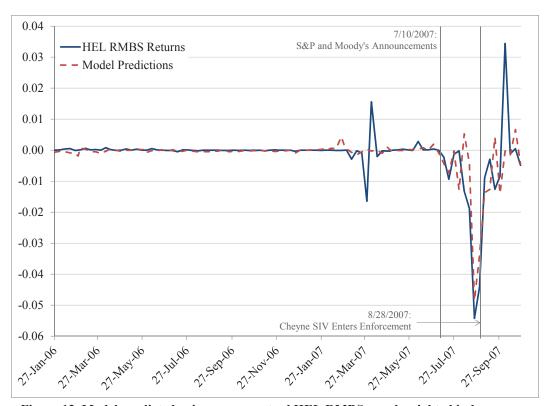


Figure 12. Model predicted prices versus actual HEL RMBS equal weighted index

- 84. As illustrated by the figure, the behavior of Cheyne SIVs HEL RMBS returns are well explained by the model. Moreover, as reported in Table 5, a large proportion of Cheyne's returns are explained by the movement of the ABX index itself. That is, the ultimate price impacts that were observed on Cheyne's HEL RMBS portfolio are primarily explained by the increased perception of default risk as measured by the ABX.
- 85. The jump in perceived default risk after the rating agencies' announcements caused a sudden deterioration across the ABX:HE (specifically the AA 2006:01) indices.

Moreover, the behavior of the ABX:HE AA 2006:01 index explains that a significant part of the Cheyne SIV's HEL RMBS deterioration was a direct consequence of the marked fall in value of its subprime assets. Had the subprime assets not devalued as much as they did, the SIV would not have entered Enforcement.

86. Together, these analyses suggest that as problems in the subprime sector emerged, investors began to disbelieve Moody's and S&P's subprime ratings. This conclusion is consistent with Moody's statements at the time. For example, after Cheyne collapsed, Moody's observed, "I don't think we can escape from the fact that the undoing of SIVs and SIV-lites is primarily explained by the overly aggressive ratings of underlying assets, from the market's perspective." Furthermore, "the fact that the portfolio assets [were] still highly rated" when Cheyne failed simply "highlight[ed] the dis-connect between our ratings and what the market [was] telling us about the quality of the assets." According to Moody's CEO, "a key reason for the disconnection between ratings and market value is that many of our RMBS/CDO ratings are not currently viewed as credible or stable. As a result, a primary reason that ratings are currently a poor proxy for market values is that the market thinks the ratings are wrong."

# 4. Independent Market Liquidity Problems Were Not to Blame

- 87. I have been asked by the Plaintiff's attorneys to examine whether liquidity issues unrelated to the alleged misreprentations and concealments may have affected the pricing of the assets and liabilities of the Cheyne SIV.
- 88. A liquidity event would temporarily move prices from their "true" value. However, permanent price drops are not liquidity events, but instead a readjustment of a price to a new level.

<sup>&</sup>lt;sup>86</sup> Ex. 339

<sup>&</sup>lt;sup>87</sup> Ex. 340

<sup>88</sup> Ex. 596

- 89. There was a dramatic fall in the prices of Cheyne SIV's subprime RMBS after the July 10<sup>th</sup> announcements by S&P and Moody's. These prices fell and remained low for over a year, and have remained low to this date. Therefore, the drop in prices in the HEL assets that caused the Cheyne SIV to enter enforcement was not due to a temporary liquidity event. Instead, the prices dropped due to a long-term readjustment in the value of the HEL assets.
- 90. The Cheyne SIV assets were ultimately sold as part of the auction as part of the Gryphon exchange were also sold at less than 44 cents on the dollar. The price of the Cheyne SIV assets was determined by a competitive auction across multiple third-party agents bidding for these assets. Auctions are commonly used by a large variety of markets to provide a fair market price on assets. The price of the Cheyne SIV assets in July 2008 was set by a competitive auction and can therefore be viewed as a fair market price. Therefore, the drop in prices was not a temporary liquidity phenomenon but instead lasted for a year or more.
- 91. Similarly, as noted in Figure 4, the ABX indices also fell after the July 10<sup>th</sup> and 11<sup>th</sup> announcements, and generally remain low to this day, well past the date of enforcement (see Figure 13 below). The ABX indices reflect the market's opinion as to the probability of default and not on the prices of the HEL assets per se. The drop in the ABX indices are directly related to the July 10<sup>th</sup> and 11<sup>th</sup> announcements by S&P and Moody's and reflect a long-term, underlying readjustment of the expectation of default.



Figure 13. Performance of relevant ABX:HE indices since Cheyne SIV entered Enforcement.

92. As noted in Table 5, a simple regression model only using data from the ABX indices and the five year Treasury bond explains the movement in the HEL assets well, and in particular, models the drop in the marks on the Cheyne HEL assets both before and after the July 10<sup>th</sup> announcements. A dummy variable to cover the period after the July 10<sup>th</sup> announcements is statistically significant, but relatively small at about 1 percent. These results suggest that the ABX index alone is able to explain most of the drop in value after July 10<sup>th</sup> and that there is nothing particularly unusual about the marks in this period. In addition, the model estimates rather well the marks on both the July 10<sup>th</sup> date and the August 31<sup>st</sup> date, further suggesting that there was not exogenous liquidity event that caused the marks to fall.<sup>89</sup> Collectively, these results suggest that the marks on Cheyne SIV's HEL assets did not fall due to an exogenous liquidity shock.

See also the results in Appendix MG-5.

- 93. There is little evidence across all assets that there was some sort of overall liquidity crisis during July and August 2007. During the period, there was liquidity in the market overall across multiple assets. For example, the Dow Jones Industrial Average hit its all-time high on October 9, 2007, suggesting that market participants had access to money and liquidity across multiple markets.
- 94. Further evidence of general liquidity can be demonstrated from commercial paper issuance during this time. Figure 14 below is a graph of the outstanding commercial paper in different categories from March 2007 through October 2008. It demonstrates that, while commercial paper issuances did fall at this time, they were still at levels roughly comparable to the year previous. This is true both of the larger commercial paper market, as well as in the more comparable asset-backed commercial paper market as well. This market is relevant because it is a good proxy for overall market liquidity and the chart indicates that overall liquidity was still available. The difficulties experienced by Cheyne SIV in trying to roll its ABCP was not due to an inability to issue because of a larger market wide freeze. The evidence suggests that these difficulties instead reflected issues that were themselves triggered by the Moody's and S&P announcements.

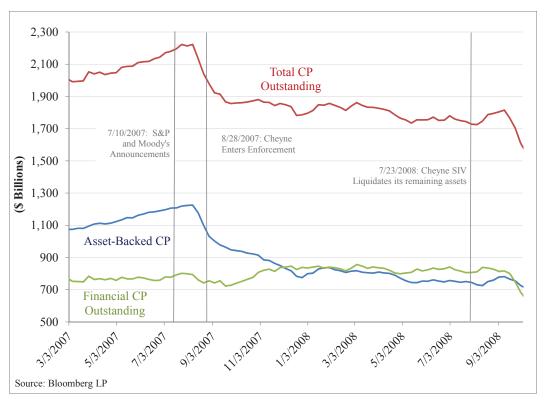


Figure 14. Outstanding Commercial paper by Category

95. Contemporaneous research reports reiterate the credit agencies contributed to the market turmoil. For example one report notes, "Moreover, a new uncertainty arises in the minds of investors as a response to recent rating agency actions – and inactions... The timing and magnitude of developments in this episode suggest the possibility that the very agents which investors rely upon for most SIV oversight may not have been completely focused on underlying asset valuations. The result has been to undermine investor confidence in rating agency surveillance of SIVS. These new doubts, piled upon what is already an incredibly challenging market, will make it harder for liquidity-driven investors to continue participating in the funding of senior debt on an ongoing basis."

# VI. ESTIMATE OF LOSSES

96. I calculate out-of-pocket losses to determine the Plaintiffs' damage due to the alleged misrepresentations. For each security at issue, out-of-pocket losses are

September 10, 2007, JPMorgan US Fixed Income Strategy, Short Duration Strategy S&P-ADCB 0016075-89

- calculated by taking the purchase price of the security and then subtracting the value of any subsequent distributions paid to the security holder. I have been instructed by counsel to assume that out-of-pocket damages should include prejudgment interest at the New York statutory rate of 9%.
- 97. I estimate losses for senior obligations held by the Plaintiffs, commercial paper (CP) and medium-term notes (MTNs) as well as any mezzanine capital notes (MCNs).
- 98. The MCN investors lost 100% of their investment.
- 99. After going into default, the Cheyne SIV made three distributions to the senior note holders. The first payment, on April 17, 2008, was a cash distribution. The second distribution, on July 23, 2008, could be taken in either cash or an equivalent share of Gryphon Notes. King County and the Pennsylvania Public School Employee Retirement System elected to take cash. All other Plaintiffs elected to take Gryphon Notes. The final payment was on August 13, 2008 and was in cash.
- 100. I rely on Plaintiffs' records and documents along with the April, July and August 2008 Portfolio Receiver Reports<sup>91</sup> to determine the distributions made to each plaintiff. For those Plaintiffs who took the option in July 2008 to obtain Gryphon Notes in lieu of cash, I value the security as the cash amount they otherwise would have received.<sup>92</sup> The cash distributions came in the form of principal distributions and interest. The July principal distribution was 44.47% of the outstanding senior obligations.<sup>93</sup> Hence, for the Plaintiffs who took Gryphon Notes, I calculate the remaining outstanding obligation for the relevant Plaintiffs' securities as of July 23, 2008 and multiply that balance by 44.47% to determine the equivalent cash value of their principal distribution. The equivalent interest distribution is calculated using the method set out in the July Portfolio Receiver Report. The principal and interest

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Bates numbers for the reports are as follows: April Portfolio Receiver Report dated April 14, 2008 (CMA0017174-177); July Portfolio Receiver Report dated July 23, 2008 (MS\_000822760-766); and August Portfolio Receiver Report dated August 12, 2008 (CMA0022796-80).

Pursuant to the explanation in the July 23, 2008 Portfolio Receiver Report. See also Gryphon Funding Limited Offer to Exchange at p. 93 and A-11 (CMA0000986-1295).

July Portfolio Receiver Report, 23 July 2008, pg. 1 (MS 000822760).

- distributions together determine the equivalent cash value of the Gryphon Notes at the time of the July distribution. These calculations are shown in Work papers MG-35 to MG-49 of Appendix MG-6.
- 101. I was instructed by counsel that pre-judgment interest is calculated from the date of default, October 17, 2007 and to use simple interest. Due to the various principal payments, the amount on which the interest is applied varies through time. The interest rate is applied to the out-of-pocket loss at the time (see Appendix MG-6, work papers MG-2 to MG-29). Interest is calculated through October 17, 2012.
- 102. Table 6 below provides a summary of the aggregate damages estimates across all Plaintiffs. The detailed damages calculations for each Plaintiff (by transactions) are presented in Appendix MG-6 to my report.

Table 6. Summary of Damages by Plaintiff

	Plaintiff [a]	Unrecovered Purchase Price [b]	9% Statutory Pre-Judgment Interest [c]	Post-Default Interest [d]	Damages [e]
[1]	Abu Dhabi Commercial Bank	10,000,000	4,500,512	0	14,500,512
[2]	Bank Hapoalim	10,000,000	4,500,512	0	14,500,512
[3]	Bank SinoPac	4,290,000	1,930,720	0	6,220,720
[4]	Butterfield	36,380,375	20,256,920	714,247	55,923,048
[5a]	Commerzbank	60,000,000	27,003,072	0	87,003,072
[5b]	Commerzbank - DAF	45,244,495	25,021,462	627,107	69,638,850
[6]	Deutsche Postbank	57,500,000	25,877,944	0	83,377,944
[7]	Florida State Board of Administration	18,608,906	10,329,552	261,580	28,676,878
[8]	Gulf International Bank	15,000,000	6,750,768	0	21,750,768
[9]	King County, Washington	18,173,597	10,078,296	1,141,409	27,110,485
[10]	National Agricultural Cooperative Federation	10,000,000	4,500,512	0	14,500,512
[11]	Global Investment Services Ltd. (New Zealand)	3,690,000	1,660,689	0	5,350,689
[12]	Pennsylvania Public School Employee Retirement System	3,821,555	2,104,325	171,395	5,754,486
[13]	SEI Investments Co	105,693,060	58,553,638	1,441,328	162,805,370
[14]	SEI Straegies LLC	37,768,685	20,876,247	521,693	58,123,239
[15]	SFT Collective Investment Fund	37,522,921	20,777,715	524,036	57,776,601
	Total Damages for All Plaintiffs	473,693,595	244,722,886	5,402,795	713,013,685

Source: Workpaper MG-1.

September 16, 2012
Date

Curriculum Vitae of Michael A. Goldstein

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### **EDUCATION**

The Wharton School, University of Pennsylvania, Philadelphia, PA

Ph.D. in Finance, August 1993.

Fellowships: Geewax-Terker Fellow, 1988-91, Rodney L. White Fellow, 1992-93

M.A. in Finance, May 1992.

M.B.A. in Finance and Management, May 1991.

B.S. in Economics, summa cum laude, May 1986. Concentration in Finance.

Honors: Phi Beta Kappa, 1986, Beta Gamma Sigma, 1985

### RESEARCH INTERESTS

Market microstructure, corporate finance, international finance, real estate finance

#### ACADEMIC EXPERIENCE

Professor of Finance, Babson College, September 2007 to present.

- Chair, Finance Department 2012 to present
- Donald P. Babson Endowed Chair in Applied Investments 2010-present
- Faculty Director, The Stephen D. Cutler Center for Investments and Finance 2009-2012
- Natalie Taylor Senior Term Chair 2009-2010
- Babson Faculty Scholar 2005 2009
- Babson College Faculty Excellence in Scholarship Award, September 2008, September 2012
- Chair, Faculty Senate, 2009 2010 (co-creator of the Senate and member of the first Senate)

Honorary Professor, The Queen's University of Belfast (Northern Ireland, UK), January 2009 to present

Visiting Professor, Trinity College, Dublin (Ireland), January 2009 to July 2009

Associate Professor of Finance, Babson College, September 2000 to August 2007.

- Joseph Winn Term Chair 2000 2005
- Chair, Faculty Governance Task Force, 2005-2006
- Elected Member, Undergraduate Decision Making Body, 2005-2008
- Director, Finance Immersion Program, 2006-2007

<u>Assistant Professor of Finance</u>, *University of Colorado at Boulder*, College of Business and Administration, 1993 – 2000

- Recipient, Procter & Gamble Teaching Excellence Award, 2000 Selected by vote of graduating seniors. Received \$3,000 stipend.
- Recipient, Chi Omega Outstanding Educator Award, 1994.
- Burridge Center Research Fellow
- Assistant Director, CU Real Estate Center

<u>Visiting Economist</u>, *New York Stock Exchange*, International and Research Division, 1997 - 1998.

One year visiting scholar-in-residence. Have direct access to the trading floor and NYSE data sets

and internal documents. Worked on a variety of research projects for the NYSE for eventual publication in academic finance journals. Provide advice to NYSE staff.

Visiting Assistant Professor of Finance, Boston College, Carroll School of Management, 1996-1997.

University of Pennsylvania, The Wharton School

- The Financial Institutions Center, Senior Fellow, 1993-1995
- Rodney L. White Center for Financial Research, <u>Research Associate</u>, 1990-1992.
- Finance Department, <u>Teaching Assistant</u>, 1991-1992

#### RESEARCH AWARDS

Babson College Faculty Excellence in Scholarship Award (September 2008)
Best Paper in Derivatives/Market Microstructure (Eastern Finance Association Meetings 2007)
Best Paper in Market Microstructure (Financial Management Association Meetings 2006)
Best Paper in Market Microstructure (Financial Management Association Meetings 2000)

# **MAJOR GRANTS**

National Science Foundation (NSF), 2009-2012: Co-Principal Investigator on a \$385,000 total grant Diamonds from the Tundra: A System Study on the Impact of Changing Seasons on Mining Exploration to study the economic impact of the change in seasonality on the Arctic economy.

## **PUBLICATIONS**

"Purchasing IPOs with commissions: Theoretical predictions and empirical results", (with P. Irvine and W. A. Puckett), *The Journal of Financial and Quantitative Analysis*, Vol. 46, No. 5, Oct. 2011, pp. 1193–1225

"Do Dividends Matter More in Declining Markets?" (with K. Fuller). *The Journal of Corporate Finance*, Vol. 17, No. 3, June 2011, 457-473.

"Inter-Market Competition for NYSE-listed Securities" (with A. Shkilko, B. Van Ness, and R. Van Ness), *The Review of Quantitative Finance and Accounting*, Vol. 35, No. 4, November 2010, 371-391.

• Lead article of the November 2010 issue

"InterCon Travel Health: Case B," (with G. Truman and D. Pachamanova), *Journal of Information Systems Education*, Vol. 21, Number 1, Spring 2010, 27-32.

"An Analysis of Liquidity across Markets: Execution Costs on the NYSE Versus Electronic Markets" (with G. Hu and J. Ginger Meng), <u>Liquidity</u>, <u>Interest Rates</u>, and <u>Banking</u>, 2009, Jeffrey Morrey and Alexander Guyton (editors), Nova Publishers, Chapter 7, 139-167.

"Brokerage Commissions and Institutional Trading Patterns" (with P. Irvine, E. Kandel and Z. Wiener), *The Review of Financial Studies*, December 2009, Vol. 22, No. 12, 5175-5212.

"Competition in the Market for NASDAQ Securities" (with A. Shkilko, B. Van Ness, and R. Van Ness), *Journal of Financial Markets*, Vol 11, No 2, May 2008, 113-143.

- Lead article of the May 2008 issue
- Won Best Paper in Derivatives/Market Microstructure at the 2007 Eastern Finance Association Annual Meeting.

"InterCon Travel Health Teaching Note and Case Study" (with G. Truman and D. Pachamanova), *Journal of the Academy of Business Education*, Vol 8, Summer 2007, 17-32.

"Transparency and Liquidity: A Controlled Experiment on Corporate Bonds" (with E. Hotchkiss and E. Sirri), *The Review of Financial Studies*, Vol. 20, No. 2, March 2007, 235-273.

- Lead article of the March 2007 issue
- Won Best Paper in Market Microstructure at the 2006 Financial Management Association Annual Meeting. (Top 10% Session)

"The Intraday Probability of Informed Trading on the NYSE" (with B. F. Van Ness and R. A. Van Ness), <u>Advances in Quantitative Analysis of Finance and Accounting</u>, 2006, Ivan Brick, Tavy Ronen, and Chen-Few Lee (editors), World Scientific Press, Vol. 3, Chapter 7, 139-158.

"Trading Strategies during Circuit Breakers and Extreme Market Movements" (with K. Kavajecz), *Journal of Financial Markets*, Vol. 7, No. 3, June 2004, 301-333.

- Won Best Paper in Market Microstructure at the 2000 Financial Management Association Annual Meeting.
- In the top ten most downloaded papers on the Financial Economics Network (Market Microstructure) within 60 days of submission.

"Eighths, Sixteenths, and Market Depth: Changes in Tick Size and Liquidity Provision on the NYSE" (with K. Kavajecz), *Journal of Financial Economics*, Vol. 56, No. 1, April 2000, 125-149.

"Market Making and Trading in NASDAQ Stocks" (with E. Nelling), *Financial Review*, February 1999, Vol. 34, No.1.

"REIT Return Behavior In Advancing and Declining Stock Markets" (with E. Nelling), *Real Estate Finance*, Winter 1999, Vol. 15, No.4, 68-77.

"Privatization in Post-Communist Economies" (with B. Gultekin), in <u>Financial Sector Reform and Privatization in Transition Economies</u>, John Doukas, Victor Murinde and Clas Wihlborg (editors), *Advances in Finance, Investment and Banking*, North-Holland, Vol. 7, 283-327, 1998.

"Privatization Success and Failure: Finance Theory and Regulation in the Transitional Economies of Albania and the Czech Republic", *Managerial and Decision Economics*, November-December 1997, Vol. 18, No.7&8, 529-544.

"Quotes, Order Flow, and Price Discovery" (with M. Blume), *The Journal of Finance*, March 1997, Vol. 52, No.1, 221 - 244. Abstract appeared in *Journal of Finance*, July 1997.

"Pratiquer les meilleurs prix permet-il d'attirer les transactions? Cotations et flux d'Ordres sur les bourses américaines" (with Marshall Blume), *Organisation et qualité des marchés financiers*, (Chapitre XIII), Presses Universitaires de France, ed. Biasis, Davydoff and Jacquillat, 1997.

"Real Estate Investment Trusts, Small Stocks, and Bid-Ask Spreads" (with E. Nelling, J. Mahoney, and T. Hildebrand), *Real Estate Economics*, Spring 1995, Vol. 23, No. 1, 45-63.

### PUBLISHED PROCEEDINGS

"Circuit Breakers, Volatility, and U.S. Equity Markets: Evidence from NYSE Rule 80A" (with J. Mahoney and J. Evans), October 1998. *Proceedings of the Second Joint Central Bank Research Conference on Risk Measurement and Systematic Risk*, Bank of Tokyo, Japan.

"On the Integration of the U.S. Equity Markets" (with Marshall Blume), (also a working paper; see below).

- Proceedings of the Competition for Order Flow: A Market Microstructure Conference, October 1995
- Proceedings of the Indiana University Conference on Market Microstructure, August 1995.

"A Comparison of Spreads and Volatilities on U.S. Exchanges," *Proceedings of the Competition for Order Flow: A Market Microstructure Conference*, March 1994. (Similar to the Competitive Specialist vs. Dealer Markets working paper; see below).

"The Liquidity of Real Estate Investment Trusts" (with T. Hildebrand, J. Mahoney and E. Nelling), Proceedings of the Wharton Real Estate Center's Fifth Annual Student Research Competition, 1992.

"Differences in Execution Prices on the Regionals and the NYSE" (with M. Blume), *AFFI (French Finance Association) Proceedings 1992*. Also appeared as *Rodney L. White Center for Financial Research* Working Paper 4-92, The Wharton School, December 1992. (See below)

"Eastern European Privatization: A Theoretical Analysis" (with B. Gultekin), AFFI Proceedings 1991.

## **WORKING PAPER SERIES**

"Trading at the Speed of Light: The Impact of High-Frequency Trading on Market Performance, Regulatory Oversight, and Securities Litigation" (with Pavitra Kumar, Frank Graves, and Lynda Borucki), *Finance: Current Topics in Corporate Finance and Litigation*, 2011, Issue 2, The Brattle Group.

"Liquidity Provision during Circuit Breakers and Extreme Market Movements" (with K. Kavajecz), in *NYSE Working Paper* 00-02 and *Rodney White Center for Financial Research* Working Paper 01-00.

"Eighths, Sixteenths, and Market Depth: Changes in Tick Size and Liquidity Provision on the NYSE" (with K. Kavajecz), *NYSE Working Paper* 98-01 and *Rodney White Center for Financial Research* Working Paper 14-98. (After changes, published in the *Journal of Financial Economics*.)

"On the Integration of the U.S. Equity Markets" (with Marshall Blume), *Rodney White Center for Financial Research* Working Paper 1-95, The Wharton School, January 1995.

"Competitive Specialist vs. Dealer Markets: Effective and Displayed Spreads on NASDAQ NMS and the U.S. Stock Exchange System", *Faculty Working Paper Series* Working Paper 94-5, University of Colorado, March 1994.

- Cited in the *Journal of Business* and the *Journal of Finance*.
- It is the first and most oft-cited paper in the famous Christie and Schultz Nasdaq collusion paper in the *JF*.

"Displayed and Effective Spreads by Market" (with M. Blume), Rodney L. White Center for Financial

Research Working Paper 27-92, The Wharton School, December 1992.

Cited over ten times, including in Journal of Finance, Journal of Financial Economics, Journal of Financial and Quantitative Analysis, Journal of Financial Intermediation

"Differences in Execution Prices on the Regionals and the NYSE" (with M. Blume), Rodney L. White Center for Financial Research Working Paper 4-92, The Wharton School, December 1992.

- Discussed in New York Times (March 2, 1992, p. D1.) and Barron's (January 20, 1992).
- Cited over ten times, including in Journal of Finance, Journal of Financial Economics, Journal of Financial and Quantitative Analysis, Journal of Financial Intermediation, Journal of **Business**

# **CURRENT WORKING PAPERS**

"Dealer Behavior and the Trading of Newly Issued Corporate Bonds", with Edith Hotchkiss.

- Presented at the 2009 American Finance Association Annual Meetings
- Presented at the 2009 Financial Management Association Meetings (top 10% session)
- SSRN's Top Ten download list for Behavioral & Experimental Accounting

"Liquidity and the Pricing of Corporate Bond Issues", with Edith Hotchkiss and David Pederson.

Presented at the 2009 Financial Management Association Meetings

"Know when to hold them, know when to fold them: Dealer Behavior in Highly Illiquid Assets" (with Edith Hotchkiss)

"Splitting Orders, Serial Correlation, and Spurious Asymmetric Information", with Lynn Doran, Evgenia Golubeva, and Eric Hughson.

Presented at the 2008 Finance Management Association Annual Meetings

# EDITORIAL BOARD AND SAMPLE REFEREE AND GRANT REVIEW EXPERIENCE

Associate Editor, Financial Management, 2011 to present

Associate Editor, *The Financial Review*, 2009 to present

Special Guest Editor, Special Issue on Computerized/High Frequency Trading, The Financial Review, 2012

Editorial Board, International Review of Applied Financial Issues and Economics, 2010 to present

Journal of Finance Review of Financial Studies Journal of Financial and Quantitative Analysis Journal of Financial Markets Journal of Financial Intermediation

Journal of Empirical Finance Journal of International Money & Finance International Review of Applied Financial Issues and Economics

Swiss National Science Foundation, Switzerland

AMBIO: A Journal of the Human Environment

UK Department for Business, Innovation, and Skills, Government Office of Science, United Kingdom

Journal of Futures Markets

Financial Review European Financial Review

Journal of Business and Economics European Journal of Finance

#### SAMPLE OF RESEARCH-RELATED CONFERENCES

Allied Social Sciences Association Conference, January 1993-2009

Presenter, "Dealer Behavior and the Trading of Newly Issued Corporate Bonds" (2009)

Presenter, "Purchasing IPOs with commissions: Theoretical predictions and empirical results" (2007)

Discussant, "Informed and Strategic Order Flow in the Bond Market" (2007)

Presenter, Transparency and Liquidity: A Controlled Experiment on Corporate Bonds" (2006)

Presenter, "Liquidity Provision during Circuit Breakers and Extreme Market Movements" (2001)

Presenter, "REIT Executive Compensation and Stock Performance" (2000)

Chair, Real Estate Finance Session (1998)

Presenter, "Quotes, Order Flow, and Price Discovery" (1997)

Presenter, "Equity vs. Mortgage REITs: Stocks or Bonds?" (1996)

Financial Management Association Conference, October 1994-2004, 2006, 2007, 2009, 2010, 2011.

Presenter, "Know when to hold them, Know when to fold them: Dealer Behavior in Highly Illiquid Assets" (2011)

Discussant, "Corporate Bond Clawbacks (IPOCs): Theory and Evidence", 2011

Presenter, "Dealer Behavior and the Trading of Newly Issued Corporate Bonds" (2009)

Paper on Program, "Liquidity and the Pricing of Corporate Bond Issues" (2009)

Paper on Program, "Splitting Orders, Serial Correlation, and Spurious Asymmetric Information" (2008)

Best Paper in Market Microstructure Award Committee (2007)

Presenter, "Purchasing IPOs with commissions: Theoretical predictions and empirical results" (2007)

Top 10% Session.

Panel Member, "Exchange Realignments on Both Sides of the Atlantic" Special Panel (2007)

Chair, Liquidity and Asset Pricing session (2007)

Top 10% Session.

Discussant, "Liquidity Co-movement in Corporate Bonds: Evidence and implications" (2007)

Program Track Chair – Investments (2006)

Presenter, "Transparency and Liquidity: A Controlled Experiment on Corporate Bonds" (2006)

Top 10% Session. Won **Best Paper In Market Microstructure Award**.

Presenter, "Competition and Consolidation in the Market for NYSE-listed Securities" (2006)

Chair, Markets and Structure Session (Top 10% Session). (2006)

Presenter, "Dividend Policy and Market Movements" (2004)

Presenter, "Electronic Limit Order Books, Dealer/Specialists, and Inter-Market Competition on NASDAQ" (2004)

Discussant, "Dynamics of the Electronic Limit Order Book Around Macroeconomic News Releases" (2004)

Presenter, "The Intraday Probability of Informed Trading" (2003)

Chair, Microstructure Session (2003)

Discussant, "Controlling for Anticipation in Stock Price Reactions to Credit Downgrades" (2003)

Presenter, "Brokerage Commissions and Institutional Trading Patterns" (2002)

Discussant, "Parameter Stability and the Valuation of Mortgages and Mortgage-backed Securities" (2002)

Presenter, "Are Dividends Dead?" (2001)

Presenter, "Liquidity Provision during Circuit Breakers and Extreme Market Movements" (2000). Won **Best Paper in Market Microstructure Award**.

Chair, Off-Hours Trading (2000)

Presenter, "Eighths, Sixteenths, and Market Depth: Changes in Tick Size and Liquidity Provision on the NYSE" (1999)

Chair, Security Issuances (1998)

Presenter, "REIT Return Behavior In Advancing and Declining Stock Markets" (1998)

Presenter, "Circuit Breakers, Volatility, and U.S. Equity Markets: Evidence from NYSE Rule 80A" (1998)

Presenter, "Circuit Breakers and Liquidity Provision during Extreme Market Movements" (1998)

Discussant, "Consequences of Adopting Long-Term Compensation Plans for Directors" (1998)

Discussant, "Nasdag/CSE Dual-Trading Experiment" (1998)

Chair, Market Microstructure Session (1997)

Presenter, "Equity vs. Mortgage REITs: Stocks or Bonds?" (1996)

Presenter, "Market Making, Trading Activity and Price Improvement on NASDAQ" (1995)

Presenter, "Quotes, Order Flow and Price Discovery" (1995)

Presenter, "Privatization of Post-Communist Countries" (1995)

Discussant, "On Price Improvement and the Protection of Limit Orders" (1995)

Discussant, "Who Gets Price Improvement on the NYSE?" (1994)

Western Finance Association Meetings, June 1994-2000, 2002, 2004-2006.

Presenter, "Do Dividends Matter More in Declining Markets?", (2005)

Co-Presenter, "Liquidity Provision during Circuit Breakers and Extreme Market Movements" (2000)

Discussant, "Adjusted Price Improvement" (2000)

Presenter, "Eighths, Sixteenths, and Market Depth: Changes in Tick Size and Liquidity Provision on the NYSE" (1999)

Eastern Finance Association Meetings, 2011 – 2012

Presenter, "Know When to Hold Them, Know When to Fold Them: Dealer Behavior in Highly Illiquid Risky Assets" (2012)

Chair, "Boston Area Finance Symposium 2" (2012)

Presenter, "Dealer Behavior and the Trading of Newly Issued Corporate Bonds" (2011)

Discussant, "Securities issuers are newsboys: The risk of setting a fixed-offer price can explain underpricing in firm-commitment and best-efforts IPOs"

Chair, "IPO, Directors' Dealings, and Ownership Concentration"

Southern Finance Conference, Savannah, GA, 2001

Program Track Chair

Presenter, "Liquidity Provision during Circuit Breakers and Extreme Market Movements"

Chair, Special Session on Academics in Market Entities.

National Bureau of Economic Research Market Microstructure Conference, 1996-99, 2001-2009

Co-Presenter, "Liquidity Provision during Circuit Breakers and Extreme Market Movements" (1999)

Utah Winter Finance Conference, 2000

Presenter, "Liquidity Provision during Circuit Breakers and Extreme Market Movements"

INFINITI Conference, Dublin, Ireland, 2009, 2010.

Presenter, "Dealer Behavior and the Trading of Newly Issued Corporate Bonds" (2010)

Discussant, "Re-examining the risk-return relationship: The Influence of financial crisis (2007-2009)" (2010)

Financial Management Association-European Conference, June 2003-05.

Presenter, "Brokerage Commissions and Information Allocation", Siena, Italy, (2005)

Presenter, "Dividend Policy and Market Movements", Zurich, Switzerland (2004)

Discussant, "Where do Informed Traders Trade? The Role of Financial Intermediaries in Strategic Trading" (2004)

Presenter, "Revealed Preferences, Trading Strategies, and Extreme Market Movements" (2003)

Discussant, "The Equity Mix in Executive Compensation: An Investigation of Cross-Country Differences" (2003)

Harvard Business School Entrepreneurship, Venture Capital, and IPO Conference, December 2006

Presenter, "Purchasing IPOs with commissions: Theoretical predictions and empirical results." International Industrial Organization Conference, April 2006

Presenter, "Inter-market Competition and Fragmentation on Nasdaq."

The Competition for Order Flow: A Market Microstructure Conference, 1994, 1995, 1998

Presenter, "Quotes, Order Flow and Price Discovery." (October 1995)

Presenter, "A Comparison of Spreads and Volatilities on U.S. Exchanges." (March 1994)

AFFI (French Finance Association) International Conference in Finance, 1991, 1992

Presenter, "Differences in Execution Prices Among the NYSE, the Regionals and the NASD" (1992) Discussant, "Evidence on the Effect of Taxes on Price and Volume around the Ex-dividend Day" (1992)

Presenter, "Eastern European Privatization: A Theoretical Analysis" (1991)

New York Stock Exchange (NYSE) Conferences, 1997, 2001, 2003

Buy-side Institutional Equity Desks Conference, Palm Beach, FL, December 2003.

Presenter, "List Trading"

Practices and Concerns of Buy-side Institutional Equity Desks Conference, Palm Beach, FL, December 2001.

Presenter, "Brokerage Commissions and Information Allocation"

Global Equity Conference, Cancun, Mexico, May 1997.

Global Risk Measurement and Systematic Risk Research Conference, Tokyo, Japan, November 1998.

Presenter, "Circuit Breakers, Volatility, and U.S. Equity Markets: Evidence from NYSE Rule 80A" (1998)

Hofstra Conference on Securities Markets, Hofstra, NY, October 1998.

Presenter, "Eighths, Sixteenths, and Market Depth: Changes in Tick Size and Liquidity Provision on the NYSE"

INFORMS International Meeting, Tel Aviv, Israel, July 1998.

Presenter, "Market Making and Trading in NASDAQ Stocks"

Olsen High Frequency Data Conference II, Zurich, Switzerland, March 1998.

SBF-Paris Bourse Conference on the Organization of Equity Markets, Paris, France, December 1996.

Presenter, "Quotes, Order Flow, and Price Discovery."

Symposium on the Organization of Financial Trade and Exchange Mechanisms, Indiana University, Bloomington, IN, August 1995.

Presenter, "On the Integration of the U.S. Equity Markets"

Front Range Seminar Series, University of Colorado at Colorado Springs, CO, November 1994.

Presenter, "On the Integration of the U.S. Equity Markets"

Second Annual Conference on Finance and Accounting, Buffalo, September 1991.

Presenter, "Differences in Execution Prices Among the NYSE, the Regionals and the NASD"

Arctic Research Consortium of the US Conference, Changing Seasonality in the Arctic System Project Meeting, Burlington, VT, October 2010.

Presenter, "Diamonds and Oil from the Tundra: A System Study on the Impact of Changing Seasons on Mining and Oil Exploration"

International Congress of Arctic Social Sciences (ICASS VII), Akureyri, Iceland, (2011)

Presenter, "Cold Hard Cash: The Economic Importance of Ice in the Arctic" and "Grateful Dettah: The Value of an Ice Road to a Small Community in the Northwest Territories of Canada"

## INVITED RESEARCH PRESENTATIONS

2010 Bank of International Settlements (Basel, Switzerla	nd)

<sup>2009</sup> Queen's University (Belfast); Instituto de Empresa (Madrid)

2005 University of Mississippi, Queen's University (Canada), Bank of Canada

<sup>2008</sup> University of Wisconsin (Madison), University of Virginia (Darden)

<sup>2007</sup> Bentley College, Drexel University, State Street Global Advisors

<sup>2006</sup> Suffolk University

# Case 1:08-cv-07508-SAS-DCF Document 567-3 Filed 02/15/13 Page 59 of 132 **Appendix MG-1**

Michael A. Goldstein, Ph.D.

2004 University of Colorado at Boulder (Burridge Center Conference)

2002 Brandeis University

2000 U.S. Securities and Exchange Commission; Georgetown University

Prior to 2000: University of Miami, University of Georgia

#### U.S. GOVERNMENT ROUNDTABLES

U.S. Securities and Exchange Commission:

Market Structure Roundtable, Panelist, Panel Two – High Frequency Trading (June 2, 2010) Decimalization Roundtable, Division of Market Regulation (December 11, 2000)

# OTHER PRESENTATIONS/CONFERENCES/ROUNDTABLES

Security Traders Association (STA)14<sup>th</sup> Annual Congressional Conference, Willard Hotel, Washington, DC, April 2011

Moderator, "Transparency: Where is the Tipping Point?"

BTIG Global Exchange Forum : Current Trends for Global Exchanges & Liquidity Providers, Waldorf Astoria, New York, NY, March 2011

Moderator, Market Structure Discussion Panelist, The Future of Exchanges

Financial Industry Regulatory Authority (FINRA):

Academic Roundtable, New York, NY, November 2010

**Panelist** 

Economic Advisory Board Meeting, Washington, DC

Presenter, "Trading at the speed of light -- fast trading, high frequency trading", October 2009

Presenter, "Commissions and Information Sharing", August 2008

Boston Bar Association, Investment Companies & Advisers Committee meeting, Boston, MA
Presenter, "Trading at the Speed of Light: Naked Access, Fast/Algorithmic Trading, Dark Pools, and More", November 2009

The Brattle Group, Cambridge, MA

Presenter, "Trading at the Speed of Light: The Impact of High-Frequency Trading on Market Performance, Regulatory Oversight, and Securities Litigation", Everest Restaurant, Chicago Stock Exchange, March 2011

Presenter, "Trading at the Speed of Light: High-Frequency Trading and the Role of Regulation", Le Bernadin, New York, NY, October 2010

Presenter, "From trading once a month to trading at the speed of light -- corporate bonds to fast equity trading", Cambridge, MA, December 2009

National Investor Relations Institute (NIRI)

Annual Conference, Grand Lakes Resort, JW Marriott, Orlando, FL, June 3, 2007 Presenter, "Capital Market Fundamentals"

Boston Regional Meeting (multiple years)

Presenter, "Capital Markets"

Brazil Securities and Exchanges Commission (CVM – Comissão de Valores Mobiliários), joint with the Getulio Vargas Foundation - Rio de Janeiro Law School (FGV-Direito Rio)

Financial and Capital Markets Regulation at Crossroads: Lessons, Prescriptions, Predictions, for Brazil and the US

Panelist, Liquidity, risk assessment and debt (December 14, 2009)

Presenter, "Dealer Behavior, Transparency, and Liquidity in US Corporate Bonds"

### CONFERENCE SERVICE

Financial Management Association:

Program Track Chair – Investments (2006)

Program Committee (1997 – 2007, 2009, 2010)

Best Paper in Microstructure Committee (2001, 2007, 2010 -- Chair)

Financial Management Association – European Conference:

Program Committee (2007)

Southern Finance Association:

Program Track Chair (2001)

Best Paper Committee (2001)

Program Committee (2001)

Eastern Finance Association:

Program Committee (2001, 2011)

American Real Estate and Urban Economics Association:

Program Committee (1997-1999)

# ACADEMIC AND PROFESSIONAL AFFILIATIONS

Eastern Finance Association, Board of Directors (2010-2011, 2012 - present)

Phi Beta Kappa American Finance Association
Beta Gamma Sigma Western Finance Association
Delta Sigma Pi Financial Management Association

Marquis Who's Who in America American Real Estate and Urban Economics Association

# PROFESSIONAL EXPERIENCE

Financial Industry Regulatory Authority (FINRA) Economic Advisory Board/Committee, Chair, 2011 to present, Member, 2007 to present

National Association of Securities Dealers, Independent Economist, 2002 to present

Appointed "Independent Economist" by the NASD to examine the effects of transparency on fixed income market liquidity.

The Brattle Group, Senior Advisor 2006 - present

Issuer Advisory Group, Board of Advisors 2006-present

The Kellogg Group (Performance/Kellogg Specialists), Independent (Compliance) Consultant, 2005.

Appointed independent consultant to review/recommend compliance procedures approved by the

NYSE and the SEC as per consent decree.

NASDAQ Economic Advisory Board. Chair 2005, Member 2003 to 2005

Consultant for MetLife to help with creating international strategy and growth strategy. Also consultant to other major financial services companies, and arbitration/litigation regarding valuation, intellectual property, mutual funds, trading, commissions, and execution quality.

The Buyers Page. com, Board of Advisors 2000-2001.

IPing.com, Board of Advisors 1999-2001

## JD.com, Co-CEO, President, and Secretary 1999 -2001

Created, run and advise Internet start-up. Intimately involved with writing patent application and business plan. Supervising interactions with venture capitalists.

National Association of Graduate-Professional Student Services, Inc., 1991-1993

President and member of Board of Directors.

Officer in nationwide student health insurance not-for-profit broker. Brokered \$5 million contract.

Ministry of Ownership Changes (Warsaw, Poland), Summer 1990

Advisor, Office of the Minister

Helped formulate privatization program for Poland. Supervised team of MBA students. Analyzed various privatization proposals. Presented results to Deputy Prime Minister of Poland.

Merrill Lynch Capital Markets (New York, NY), 1986 - 1988

Financial Analyst, Investment Banking Division

- Financial Institutions Group: Assisted on various proposals, financings and M&A transactions including initial public offerings for thrift institutions, a \$100 million Preferred Stock offering for a major New York commercial bank and many debt and interest rate financings.
- Japan Banking Group: Marketed every type of financing to Japanese corporations, including real estate transactions, joint ventures, private placements, commercial paper, interest rate swaps and M&A analyses.

# SAMPLE PROFESSIONAL MEDIA APPEARANCES

# Television:

New England Cable News, This Week in Business, June 5, 2011

WCVB-TV (Channel 5), Boston, November 19, 2009.

Bloomberg TV, Evening Edition (Live), September 18, 2008

WHDH-TV (Channel 7), September 18, 2008

Fox 25, Boston, Fox Affiliate, January 21, 2008

News Hour with Jim Leher, Public Broadcasting System, October 18, 2006

Tech TV, Cable (Nationwide), September 13, 2001

WCVB-TV (Channel 5), Boston, ABC Affiliate, September 12, 2001

News Hour with Jim Lehrer (Lead Story), Public Broadcasting System, August 31, 2001.

New England Cable News, (7:30 pm, 9:00 pm, 10:00 pm Broadcasts), August 30, 2001.

Tech TV, Cable (Nationwide), July 6, 2001

BBC World, World Business News from New York, British Broadcasting Company (Worldwide, 150+ countries), March 13, 1998

BBC One, Business Breakfast, British Broadcasting Company (UK), March 13, 1998

Moneyline, CNN News, March 12, 1998

CNNfn, March 12, 1998

NewsHour with Jim Lehrer (Live National Telecast, Lead Story), Public Broadcasting System, October 27, 1997

NewsHour with Jim Lehrer (Live National Telecast), Public Broadcasting System, March 17, 1997 Channel 7 (Denver), Morning Edition, Business Report, March 1994

### Radio:

Marketplace, National Public Radio, July 6, 2006

Marketplace, National Public Radio, July 26, 2005

National Public Radio (Nationwide), Special Coverage, (hour long call -in) September 18, 2001

WBIX 1060 AM (Boston), All Business Station, September 13, 2001

WBIX 1060 AM (Boston), All Business Station, September 11, 2001

British Broadcasting Company (England), Radio 4, "Today" program, October 29, 1997

### Print Media:

Includes international, national, and local press including:

New York Times, The Wall Street Journal, Washington Post, Barron's, Christian Science Monitor, Boston Globe, Boston Herald, Newsday, Forbes.com, Mass High Tech, Business 2.0, Boston Business Journal, Detroit Free Press, Dallas Morning News, Dow Jones News Service, Denver Post, Cincinnati Enquirer, New York Post, Dallas Business Journal, U.S. News and World Report, Plain Dealer (Cleveland, OH), Cincinnati (Ohio), Congressional Quarterly, Asahi Shimbam (Tokyo,Japan), International Herald-Tribune, and many others.

## OTHER PROFESSIONAL SPEAKING APPEARANCES

- o Montrose (CO) Chamber of Commerce
- o Broomfield (CO) Rotary Club
- o Brighton (CO) Kiwanis Club
- o Needham (MA) Investment Club

#### **CIVIC ACTIVITIES**

Investment Committee, The Pilgrim John Howland Society, 2009 to present

Treasurer, Sherborn Democratic Town Committee 2006-2008.

Chair, Sherborn Housing Partnership, 2004-2008

Chair, Elderly Tax Relief Committee (Town of Sherborn), 2003-2004

Board of Directors, Wellesley Community Children's Center, 2001-2003

Fundraiser, Dana Farber Cancer Institute, Marathon Challenge 1998-9.

Chief Financial Officer and Treasurer, Boulder County Democrats, 1996-00.

Controller, Boulder County Clinton/Gore, 1995-6.

Board of Directors, Hillel of Colorado, 1994-6.

Board of Advisors, AIESEC of Colorado, 1994-6.

Council of Recent Graduates, University of Pennsylvania, 1994-6.

Faculty Advisor, CU-Financial Management Association Student Chapter, 1993-5.

Member, Campus Task Force, Allied Jewish Federation of Colorado, 1994-5.

Chair, Graduate and Professional Student Assembly, University of Pennsylvania, 1991-2. Represented 11,000 graduate and professional students.

Liaison, Trustee Committee on Student Life, University of Pennsylvania, 1990-2.

Member, Provost's Academic Planning and Budget Committee, University of Pennsylvania, 1990-1. Reviewed budget of \$1 billion on highest university planning committee.

Columnist, The Daily Pennsylvanian, Philadelphia, PA, Spring 1990.

Producer, The Wall, Godspell, Master Harold...and the Boys, U. of Penn.,1989-1991.

### **OTHER**

Eagle Scout Licensed Instrument Rated Private Pilot Certified SCUBA diver Marathon Runner (NYC 1996, 1997; Boston 1998, 1999) Triathlete

Legal Cases, Expert Testimony/Witness, and Independent Reports for the Past Four Years

# Michael A. Goldstein, Ph.D. Legal Cases, Expert Testimony/Witness, and Independent Reports for the Past Four Years

- 1. *Jicarilla Apache Nation v. The United States of America*, United Court of Federal Claims, Case No. 02-25L
  - a. Rebuttal Report, April 29, 2011 (revised June 22)
  - b. Deposed July 20, 2011
  - c. Supplemental Report July 29, 2011
  - d. In court testimony, November 2011
- 2. Alex. Brown Management Services, Inc., et al. and Rupert Villiers, an Underwriter at Lloyd's, London, on behalf of himself and those other Lloyd's underwriters subscribing to Policy Nos. 823/FD9805176 AND 823/FD980623 7, et al., Baltimore City Circuit Court, Case No. 24-C-08-003597 CN
  - a. Deposed July 2, 2010.
- 3. Frederick Weiss v. Robert H. Swanson, Jr. et al. and Linear Technology Corporation, Delaware Chancery Court, New Castle County, Civil Action No. 2828-VCL
  - a. Report filed January 25, 2010
  - b. Rebuttal Report filed April 20, 2010
  - c. Deposed May 12, 2010
- 4. Enron Creditors Recovery Corp.., et al., v. Citigroup Inc.., et al., Adversary Proceeding, No. 03-09266 (AJG), jointly administered,

*In re Enron Creditors Recovery Corp., et al.*, Case No. 01-16034 (AJG), United States Bankruptcy Court, Southern District of New York

- a. Report filed September 1, 2007
- b. Deposed January 4, 2008
- c. Daubert Affidavit (against other witness) filed March 14, 2008
- 5. Robert Wagner (and others similarly situated) and Muriel P. Engleman v. Barrick Gold Corp., US District Court for the Southern District of New York, Case No. 1:03cv4302 and 1:03cv5059
  - a. Report submitted April 27, 2007
  - b. Deposed July 12, 2007

**Documents Relied on by Michael A. Goldstein** 

ADCB00000921-927
ADCBe0000843
BHAe0027060-65
BHAe0019440-442
SNPC0000468
SNPCe00001701-1707
SNPCe00001697-1700
SPe00000180
BTRFLD0000009-10
BTRFLD0000021-22
BTFDe0002764
CBe00006116-1 - 116-27
CBe00025721-27
CB0000001-006
CBe00009622
CBe00278163
PBe00003941
PBe00000045
PSTBNKe0442674
FSBAe00100937
FSBA0000001
VICTORY004510-511
FSBA0005697
GIB0000041-42
KC00000573-576
KCe0000259
KC00000896-897
KCe0013713
NACF0000001
NZFe0000001-002
NZFe0000012-016
NZe0000003-1
PSERS0000001
BNYM0037673
BNMY00614122
BNYM10016142-147
PSERSe0000617
SEI0011309-312
SEI0000722-727

Dates Numbers
SEI0000008-10
SEI0011309-312
SEI0014523-527
SEI0000999-1002
ESEC0000263-274
ESEC0000257
ESEC0000262
SEI0000722-727
CMA0017174-177
MS_000822760-766
CMA0022796-802
CMA0000986 - 1295
MS_000481787-855
BNYM10260634
S&P-ADCB 0349759
S&P-ADCB 0349764
S&P-ADCB 3421547-551
MDYS ADCB 281550
S&P-ADCB 3421548
BNYM10157452-454
S&P-ADCB 0111686
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MS_000082485
Z1076952
Z1076872
Z10770022
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BNYM00494319
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BNYM00630418
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VICTORY008109
BNYM00494100
Z0282179
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CMA00001666
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MS_000221699-21767
MS_000705537-5543

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S&P-ADCB 0263278-82
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MS_000418549
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Z1261906
Z1043099
BNYM00040622-8
CMA000986-1295
Z095843
Z0989158
MDYS ADCB 105481
CMA000986-1295
CMA0001296-308
S&P-ADCB 2595538
MDYS ADCB 936593-6
Z0708972- Z0708985
Z0539966 - Z0539974
S&P-ADCB 0037308
MDYS ADCB 330404
MDYS ADCB 330407
S&P – ADCB 0349747
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Z0242376
Z0287198
S&P-ADCB 2595538
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MS_001370797
MS_001370799
MS_000625187-90
S&P-ADCB 0018202
S&P-ADCB 0016075- 89

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CMA0022796-80
CMA0000986-1295
MS_000822760
S&P-ADCB 2595521-5613
Z0380198-311
Z1261906-08
Z1043099-3100
BNYM10157452-454
S&P-ADCB 0037308
MS_000051811
MDYS ADCB 084921
Z1042443
S&P ADCB 0106162-167
MS_000006106-109
Z0584047
Z0649536
Z0246698
Z0248914
Z0251025
Z0286395
Declaration of Plaintiffs Regarding Damages in Support
of Plaintiffs' Opposition to Defendants' Joint Motion for
1

**Timeline of Cheyne Default and Liquidation** 

# Appendix MG-4 Timeline of Cheyne Default and Liquidation

8/3/2005	Cheyne SIV launched with \$3 billion in initial assets	MS_000481787-855
3/2/2007	The Cheyne SIV reached its peak size of \$10.94 billion	BNYM10260634
7/10/2007	S&P placed about \$12 billion of [612 check] U.S. Subprime RMBS Classes on credit watch negative; S&P also announced that it planned to "change the methods it uses to rate existing and new mortgage bonds to reflect the increased likelihood of mortgage defaults and losses."	S&P-ADCB 0349759, S&P-ADCB 0349764, S&P-ADCB 3421547-551
	Moody's downgraded 399 RMBS and put another on watch for possible downgrade.	MDYS ADCB 281550
7/12/2007	S&P downgraded 498 of the securities it had placed on negative watch	S&P-ADCB 3421548
8/20/2007	Cheyne SIV breached Minor Capital Loss Test, entered restricted investment mode	BNYM10157452-454
8/28/2007	Cheyne SIV Enforcement Event from breach of Major Capital Loss Test	S&P-ADCB 0111686, Z1261906-908
	S&P downgraded Cheyne SIV CP ratings from A-1+ to A-2 (negative watch), MTN ratings from AAA to A- (negative watch) and MCN ratings from A to B- (below investment grade).	MS_000082193
9/4/2007	Receivers appointed from Deloitte (Nick Edwards, Neville Kahn, Nick Dargan)	MS_000082485
9/5/2007	MCN and CCN downgraded from A3 and Baa2 to Caa2 and Caa3 respectively by Moody's	Z1076952, Z1076872
9/7/2007	MCN downgraded to CCC- by S&P	Z1077002
9/12/2007	Request for refinancing proposal issued to 9 parties	BNYM00495086
9/17/2007	Received refinancing proposals from 7 parties	BNYM00495086

9/24/2007	Revised refinancing proposal received	BNYM00495086
9/25/2007	Informal Senior Creditors' Committee (7 CP/MTN/Liquidity Provider-60% of Sr debt) & Junior Creditors' Committee (4 MCN holders-37% of MCN) established	BNYM00494319 Z1235535
10/4/2007	CP downgraded from P-1 to Not Prime and MTN downgraded from Aaa to Ba3 by Moody's	BNYM00630418
10/17/2007	Insolvency Event declared by Receivers	CMA0001309
10/19/2007	CP, MTN, MCN and CCN downgraded to D by S&P	VICTORY008109
10/22/2007	SIV entered into exclusivity agreement with RBS on restructuring (front contender)	BNYM00494100
10/23/2007	MCN downgraded to Ca and CCN downgraded to Ca by Moody's	Z0282179
10/29/2007	Exclusivity agreement with RBS expired	MS_000094327
11/2/2007	Informal Senior Creditors' Committee review of JPM, RBS, GS, and MS proposals	CMA0001666

### **Appendix MG-5**

**Supplemental Analysis Using Price Models** 

# **Appendix MG-5 Supplemental Analysis Using Price Models**

#### 1. Study of Announcement Effects Using Price Models

1. For this supplementary study, I model the ABX AA 2006:01 index (daily observations) using the 5-year U.S. Treasury rate, the spread between AAA and CCC rated corporate debt (as a proxy for the cost or default risk), and the Overnight LIBOR rate as factors. As with the returns model in the main body of my report, this price model was estimated from January 2, 2006 through to July 10, 2007 – the event date. Again, the dummy variable "downgrades" is used to measure the impact of the rating agencies' announcements. A summary of the model's performance is presented in Table MG-5-1 below.

Table MG-5-1. Results of study to determine if the ratings agency announcements caused an abnormal fall in the ABX:HE AA 2006:01 index

Source	SS	df	MS			Number of obs	364
						F(4, 359)	90.2
Model	16.2915045	4	4.07287614			Prob > F	0
Residual	16.2093419	359	0.04515137			R-squared	0.5013
						Adj R-squared	0.4957
Total	32.5008464	363	0.089534012			Root MSE	0.21249
abx_aa_0601	Model Coef.		Std. Error	t	Prob>t	[95% Conf.	Interval]
abx_aa_0601 rf_5yr	Model Coef. 0.9993053		Std. Error 0.0673598	t 14.84	Prob>t 0.000		
						0.866836	1.131775
rf_5yr	0.9993053		0.0673598	14.84	0.000	0.866836 0.0441606	1.131775
rf_5yr aaacccspread	0.9993053 0.0497542		0.0673598 0.0028443	14.84 17.49	0.000	0.866836 0.0441606 0.3356553	1.131775 0.055348

2. The model has good explanatory power with an adjusted R-squared of about 0.50, and t-statistics for the co-efficients are all strongly significant at more than a 99 percent confidence level (see "Prob> | t |"). Notably, the "downgrades" coefficient is about -1, and is also significant at beyond the 99 percent confidence level. Consistent with my findings in the main body of the report, this significant result suggests that the announcements indeed had statistically significant (negative) impacts on the ABX AA 2006:01 index – which again suggests that the

<sup>&</sup>lt;sup>1</sup> That is, downgrades = 0 prior to July 10, 2007, and downgrades = 1 on July 10, 2007.

<sup>&</sup>lt;sup>2</sup> Note, this is a two-sided statistical test.

announcements caused a significant increase in the perceived risk of default on AA rated HEL RMBS of that vintage.<sup>3</sup>

### a) The Fall in Cheyne SIV's HEL RMBS was Caused By the Rating Agency Revelations

- 3. The statistically significant deterioration of the ABX:HE indices following the July 10<sup>th</sup> and 11<sup>th</sup> announcements by Moody's and S&P, respectively, again draw a direct link between the alleged misrepresentations and a jump in the perceived default risk of HEL RMBS as a class.
- 4. To estimate the impact of the sudden shift in perceived probability of default on the value of HEL RMBS in Cheyne SIV's portfolio, I consider a regression model that relates HEL RMBS value to (essentially) the same factors used in the main body of my report: the 5-year U.S. Treasury yield, the spread between AAA rated and CCC rated corporate debt, but since I am now looking at HEL RMBS price, I use the ABX:HE AA 2006:01 price index to proxy for changes in the probability of default (instead of using the generated ABX returns series that was used in the main body of my report). The HEL RMBS price data for this analysis was also based on the S&P Weekly Rating Agency Reports. As such, the analysis was performed using matching weekly data for the underlying factors.
- 5. The HEL RMBS price model was calibrated using an estimation window running through to October 26, 2007. An "event" dummy variable for the period July 10 through October 26<sup>th</sup> is included in the model to capture potential effects by the rating agencies' announcements themselves. We start in January 2006, since the ABX: HE indices only started in 2006. The results of the model is presented in Table MG-5-2 below.

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<sup>&</sup>lt;sup>3</sup> I also performed similar tests on the ABX AAA 2006:01 index and ABX A 2006:01 index with comparable results.

Table MG-5-2. Results from model of HEL RMBS prices

Source	SS	df	MS			Number of obs	102
						F(4, 97)	105.88
Model	1455.07485	4	363.768711			Prob > F	0
Residual	333.262076	97	3.4356915			R-squared	0.8136
						Adj R-squared	0.806
Total	1788.33692	101	17.7063062			Root MSE	1.8536
hels	Model Coef.		Std. Error	t	Prob>t	[95% Conf.	Interval]
abx_aa_0601	-33.52105		6.038926	-5.55	0	-45.50665	-21.5355
abxaa2	0.1788629		0.032546	5.50	0.000	0.114269	0.243457
rf_5yr	3.693315		0.937291	3.94	0.000	1.833052	5.553577
event	-2.256113		1.806139	-1.25	0.215	-5.840798	1.328572
_cons	1645.252		279.927500	5.88	0.000	1089.674	2200.831

- 6. The term "abxaa2", which is the square of the ABX AA 2006:01 index values, is again used to capture potential non-linear elements of the relationship between credit risk and HEL RMBS price.
- As seen in the table, the adjusted R-squared statistic shows good fit of the model, at 0.806. Moreover, the coefficients are all statistically significant at levels beyond 99 percent confidence with the exception of the event dummy, which was defined as one for the period after July 10, and zero otherwise. The lack of significance in the event dummy suggests no "level" difference in the price relationship to the factors prior to the announcement and post-announcement. Effectively, the model relationship between to the first two powers of the ABX AA 2006:01 index (along with the other factors) appears to be stable across the event date. Consistent with the analysis in the main body of my report, the price impact is primarily explained by the increased perception of default risk as measured by the ABX.
- 8. Figure MG-5-1 presents the actual HEL RMBS price behavior and the predicted prices under the regression model.

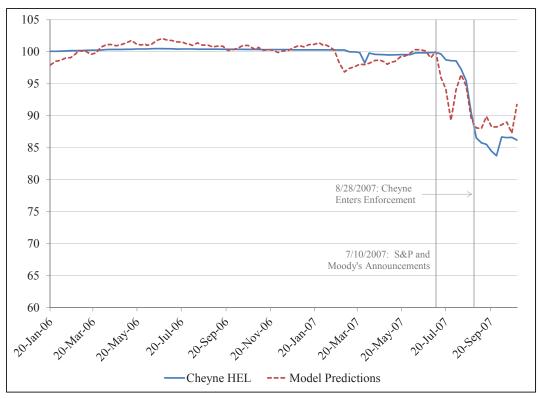


Figure MG-5-1. Model predicted prices versus actual HEL RMBS equal weighted index

9. The price marks recorded in the weekly ratings reports display a lagged response relative to model predictions. By July 27<sup>th</sup>, however, the price marks and model predictions line up almost perfectly through the fall to August 31<sup>st</sup>. Table MG-5-3 below decomposes the price fall in Cheyne SIV's HELs from just before the event date through the Enforcement date across the different statistically significant factors, as allocated by the model.<sup>4</sup>

Table MG-5-3. Model predicted price impacts from the significant factors

		Predicted P	rice Impacts
	Change		
	July 6 to Aug 31	Model	% of fall
Cheyne HELs	-13.35		
abx_aa_0601	-6.02	-8.9908	67.35%
rf_5yr	-0.85	-2.9641	22.20%

10. While interest rates did fall during this period, the magnitude of change was not anywhere near large enough to explain the deterioration that led the SIV to enforcement in the context of the

4

<sup>&</sup>lt;sup>4</sup> The table values correspond to a regression model that drops the statistically insignificant "event" dummy variable.

model. In contrast, the jump in perceived default risk at the event date that was reflected in the sudden drop of the ABX:HE (specifically the AA 2006:01) indices at the time of the Moody's and S&P announcements explains a significant part of the HEL RMBS price fall in both models.

11. This study therefore agrees with the analyses in the main body of my report.

### **Appendix MG-6**

**Damages Workpapers** 

Workpaper MG-1 Summary of Damages by Security

					,		Post-Default		
30;77;°10	Discologic Data	Committee Describer	Samueler Dumbhand   East Wolling of Mate	CITED	Unrecovered	9% Statutory	Interest	Total Damagaga	Common
Flainun [a]	rurcnase Date	Security Purchased	race value of Note	COSIF [e]	Furchase Price (3)	rurchase rrice (3) - rre-Judgment interest [4]	<u>(</u>	i otai Damages	Source
[4]	[6]	Ξ	[2]	2	[7]	[8]	[11]	Ξ	TO
[1] Abu Dhabi Commercial Bank	8/3/2005	MCN	\$10,000,000	XS0224123538	10,000,000	4,500,512	•	14,500,512	Workpaper MG-2
[2] Bank Hapoalim	9/29/2006	MCN	\$10,000,000	16705ECD3	10,000,000	4,500,512	•	14,500,512	Workpaper MG-3
[3] Bank SinoPac	10/3/2005	MCN	\$4,290,000	xs0230885500	4,290,000	1,930,720	•	6,220,720	Workpaper MG-4
[4] Butterfield	7/7/2006	MTN	\$50,000,000	16705EBY8	18,763,148	10,390,151	327,043	28,826,256	Workpaper MG-5
[5] Butterfield	5/14/2007	CP	\$50,000,000	16705MYD1	17,617,227	694,998,6	387,204	27,096,792	Workpaper MG-6
[6] Commerzbank	12/4/2006	MCN	\$60,000,000	16705EDH3	60,000,000	27,003,072	•	87,003,072	Workpaper MG-7
[7] Commerzbank - DAF	4/16/2007	MTN	\$50,000,000	16705EET6	18,986,250	10,477,532	259,800	29,203,982	Workpaper MG-8
[8] Commerzbank - DAF	6/5/2007	MTN	\$25,000,000	16705EFD0	9,409,537	5,206,438	130,791	14,485,185	Workpaper MG-9
[9] Commerzbank - DAF	5/15/2007	CP	\$45,000,000	16705RAY0	16,848,707	9,337,492	236,516	25,949,683	Workpaper MG-10
[10] Deutsche Postbank	12/20/2006	MCN	\$20,000,000	XS0280223289	20,000,000	9,001,024	•	29,001,024	Workpaper MG-11
[11] Deutsche Postbank	12/22/2005	MCN	\$17,500,000	XS0239377350	17,500,000	7,875,896	•	25,375,896	Workpaper MG-12
[12] Deutsche Postbank	2/20/2007	MCN	\$20,000,000	XS0280223875	20,000,000	9,001,024	•	29,001,024	Workpaper MG-13
[13] Florida State Board of Administration	2/1/2006	MTN	\$25,000,000	16705EAU7	9,287,740	5,158,361	130,983	14,315,118	Workpaper MG-14
[14] Florida State Board of Administration	2/10/2006	MTN	\$25,000,000	16705EAV5	9,321,166	5,171,191	130,597	14,361,759	Workpaper MG-15
[15] Gulf International Bank	8/3/2005	MCN	\$15,000,000	xs0224123538	15,000,000	6,750,768	•	21,750,768	Workpaper MG-16
[16] King County, Washington	4/18/2007	CP	\$50,000,000	16705RBC7	18,173,597	10,078,296	1,141,409	27,110,485	Workpaper MG-17
[17] National Agricultural Cooperative Federation	8/3/2005	MCN	\$10,000,000	xs0224122563	10,000,000	4,500,512	•	14,500,512	Workpaper MG-18
[18] Global Investment Services Ltd. (New Zealand)	8/3/2005	MCN	\$1,690,000	xs0224125236	1,690,000	760,587	•	2,450,587	Workpaper MG-19
[19] Global Investment Services Ltd. (New Zealand)	1/23/2007	MCN	\$2,000,000	xs0283817434	2,000,000	900,102	•	2,900,102	Workpaper MG-20
[20] Pennsylvania Public School Employee Retirement System	5/21/2007	MTN	\$10,000,000	16705EFB4	3,821,555	2,104,325	171,395	5,754,486	Workpaper MG-21
[21] SEI Investments Co	10/25/2006	MTN	\$50,000,000	16705ECW1	18,652,063	10,348,199	256,989	28,743,273	Workpaper MG-22
[22] SEI Investments Co	1/25/2007	MTN	\$125,000,000	16705EDU4	46,575,435	25,848,133	640,965	71,782,604	Workpaper MG-23
[23] SEI Investments Co	3/26/2007	MTN	\$97,000,000	16705EEM1	36,694,805	20,272,117	492,505	56,474,417	Workpaper MG-24
[24] SEI Investments Co	5/15/2007	MTN	\$10,000,000	16705EEZ2	3,770,756	2,085,189	50,869	5,805,076	Workpaper MG-25
[25] SEI Straegies LLC	3/20/2007	MTN	\$50,000,000	16705EEJ8	18,883,113	10,437,582	260,669	29,060,026	Workpaper MG-26
[26] SEI Straegies LLC	6/20/2007	MTN	\$50,000,000	16705EFF5	18,885,572	10,438,666	261,024	29,063,213	Workpaper MG-27
[27] SFT Collective Investment Fund	4/4/2007	MTN	\$50,000,000	16705EEQ2	18,938,511	10,457,499	260,531	29,135,480	Workpaper MG-28
[28] SFT Collective Investment Fund	4/20/2007	MTN	\$50,000,000	16705EEV1	18,584,410	10,320,216	263,505	28,641,121	Workpaper MG-29
Total Damages for All Securities:					473,693,595	244,722,886	5,402,795	713,013,685	

#### Workpaper MG-2 Abu Dhabi Commercial Bank: Damages Calculation

	Face V CU Purchase I	JSIP:	XS0224123538
		urity:	
[1] [2]	MCN Purchase Price:		\$10,000,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$10,000,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$10,000,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$10,000,000
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$448,053 \$240,984 \$51,639 \$3,759,836
[13]	Total Pre-Judgment Interest:		\$4,500,512
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$0 \$0 \$0 \$0
[18]	Damages		\$14,500,512
Notes	& Sources:		
[2]: [3]:	Workpaper MG-30. [1] - [2]. [1] - [2]. [2] [2] [2] [2] [2] [2] [2] [2] [2] [2]	[13]: [14]: [15]: [16]: [17]:	Simple interest: 4.18 years x [7] x [8].

### Workpaper MG-3 Bank Hapoalim: Damages Calculation

	Face Valu CUS Purchase Da	IP:	\$10,000,000 16705ECD3 9/29/2006
	Securi	ty:	MCN
[1] [2]	MCN Purchase Price:		\$10,000,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$10,000,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	_	\$10,000,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$10,000,000
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$448,053 \$240,984 \$51,639 \$3,759,836
[13]	Total Pre-Judgment Interest:	_	\$4,500,512
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	_	\$0 \$0 \$0 \$0
[18]	Damages		\$14,500,512
Notes	& Sources:		
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].       [10         Workpaper MG-30.       [11         [1] - [2].       [12         Workpaper MG-30.       [13         [3] - [4].       [14         Workpaper MG-30.       [15         [5] - [6].       [16         Per Counsel.       [17         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18         for fraction of years calculation.       [18	]: S ]: S ]: [ ]: [ ]: V ]: V	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

### Workpaper MG-4 Bank SinoPac: Damages Calculation

	Face Va CUS Purchase D Secur	SIP:	xs0230885500 10/3/2005
[1] [2]	MCN Purchase Price:		\$4,290,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008) ( - ) July '08 Distribution		\$4,290,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$4,290,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$4,290,000
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$192,215 \$103,382 \$22,153 \$1,612,970
[13]	Total Pre-Judgment Interest:		\$1,930,720
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$0 \$0 \$0 \$0
[18]	Damages		\$6,220,720
Notes	& Sources:		
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]:	Workpaper MG-30.       [1         [1] - [2].       [1         Workpaper MG-30.       [1         [3] - [4].       [1         Workpaper MG-30.       [1         [5] - [6].       [1         Per Counsel.       [1	0]: 1]: 2]: 3]: 4]: 5]: 6]: 7]: 8]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

### Workpaper MG-5 Butterfield: Damages Calculation

Face Value: \$50,00	
	0,000
CUSIP: 167051	EBY8
Purchase Date: 7/7/2	.006
Security: MT	N
[1] MTN Purchase Price:	\$49,963,750
[2] ( - ) Principal Distributions in April '08	\$9,158,611
[3] Unrecovered Purchase Price at April '08: (04/16/2008)	\$40,805,139
[4] (-) July '08 Distribution	\$18,818,513
[5] Unrecovered Purchase Price at Liquidation: (07/23/2008)	\$21,986,626
[6] (-) Principal Distributions in Aug. '08	\$3,223,478
[7] Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$18,763,148
[8] Pre-Judgment Interest Rate	9.00%
[9] (10/17/2007 To 04/16/2008), or 0.5 years	\$2,238,641
[10] (04/16/2008 To 07/23/2008), or 0.27 years	\$983,337
[11] (07/23/2008 To 08/13/2008), or 0.06 years	\$113,537
[12] (08/13/2008 To 10/17/2012), or 4.18 years	\$7,054,636
[13] Total Pre-Judgment Interest:	\$10,390,151
Less: Post-Default Interest Payments	
[14] (-) Interest Payments in April '08	\$220,486
[15] (-) Interest Payments in July '08	\$0
[16] ( - ) Interest Payments in Aug. '08	\$106,557
[17] Total Post-Default Interest Payments	\$327,043
[18] Damages	\$28,826,256
Notes & Sources:	
[1]: Workpaper MG-32, column [f]. [10]: Simple interest: 0.27	
[2]: Workpaper MG-30. [11]: Simple interest: 0.06	
[3]: [1] - [2]. [12]: Simple interest: 4.18	8 years x [7] x [8]. $\pm$ [12]
	· [14].
[4]: Workpaper MG-30. [13]: [9] + [10] + [11] -	
[4]: Workpaper MG-30. [13]: [9] + [10] + [11] - [5]: [3] - [4]. [14]: Workpaper MG-31.	
[4]: Workpaper MG-30.       [13]: [9] + [10] + [11] -         [5]: [3] - [4].       [14]: Workpaper MG-31.         [6]: Workpaper MG-30.       [15]: Workpaper MG-31.	
[4]: Workpaper MG-30.       [13]: [9] + [10] + [11] -         [5]: [3] - [4].       [14]: Workpaper MG-31.         [6]: Workpaper MG-30.       [15]: Workpaper MG-31.	

for fraction of years calculation.

### Workpaper MG-6 Butterfield: Damages Calculation

	Face Value CUSII Purchase Date Security	P: 16705MYD1 e: 5/14/2007
[1] [2]	CP Purchase Price:  ( - ) Principal Distributions in April '08	\$48,687,014 \$9,097,842
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	\$39,589,172 \$18,769,855
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	\$20,819,317 \$3,202,090
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$17,617,227
[8]	Pre-Judgment Interest Rate	9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years	\$2,181,436 \$954,034 \$107,510 \$6,623,789
[13]	Total Pre-Judgment Interest:	\$9,866,769
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	\$244,539 \$0 \$142,665 \$387,204
[18]	Damages	\$27,096,792
Notes [1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	& Sources:  Workpaper MG-32, column [f].  [10] Workpaper MG-30. [11] [1] - [2].  Workpaper MG-30. [13] [3] - [4].  Workpaper MG-30. [15] [5] - [6].  Per Counsel.  [17] Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51 for fraction of years calculation.	Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31.

#### Workpaper MG-7 Commerzbank: Damages Calculation

	Purchas	Value: CUSIP: e Date: ecurity:	16705EDH3 12/4/2006
[1] [2]	MCN Purchase Price:		\$60,000,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$60,000,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$60,000,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$60,000,000
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$2,688,318 \$1,445,902 \$309,836 \$22,559,016
[13]	Total Pre-Judgment Interest:		\$27,003,072
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$0 \$0 \$0 \$0
[18]	Damages		\$87,003,072
Notes	& Sources:		
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].  Workpaper MG-30.  [1] - [2].  Workpaper MG-30.  [3] - [4].  Workpaper MG-30.  [5] - [6].  Per Counsel.  Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51 for fraction of years calculation.	[10]: [11]: [12]: [13]: [14]: [15]: [16]: [17]: [18]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

#### Workpaper MG-8 Commerzbank - DAF: Damages Calculation

		USIP:	16705EET6
	Purchase Sec	Date: urity:	
[1] [2]	MTN Purchase Price:		\$49,990,000 \$9,134,528
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008) ( - ) July '08 Distribution		\$40,855,472 \$18,654,220
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$22,201,252 \$3,215,002
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$18,986,250
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$2,239,817 \$984,550 \$114,646 \$7,138,519
[13]	Total Pre-Judgment Interest:		\$10,477,532
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$174,965 \$0 \$84,835 \$259,800
[18]	Damages		\$29,203,982
	& Sources:	F107	Simple interests 0.27 F23 F23
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-30. [1] - [2]. Workpaper MG-30. [3] - [4]. Workpaper MG-30. [5] - [6]. Per Counsel.		Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

#### Workpaper MG-9 Commerzbank - DAF: Damages Calculation

	Purchase I	JSIP:	16705EFD0 6/5/2007
[1] [2]	MTN Purchase Price:  ( - ) Principal Distributions in April '08		\$24,996,250 \$4,592,155
[4]	(-) Trincipal Distributions in April 08		φ+,392,133
[3]	Unrecovered Purchase Price at April '08: (04/16/2008)		\$20,404,095
[4]	(-) July '08 Distribution		\$9,378,296
[5]	Unrecovered Purchase Price at Liquidation: (07/23/2008)		\$11,025,799
[6]	( - ) Principal Distributions in Aug. '08		\$1,616,262
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$9,409,537
[8]	Pre-Judgment Interest Rate		9.00%
[9]	(10/17/2007 To 04/16/2008), or 0.5 years		\$1,119,964
[10]	(04/16/2008 To 07/23/2008), or 0.27 years		\$491,705
[11]	(07/23/2008 To 08/13/2008), or 0.06 years		\$56,937
[12]	(08/13/2008 To 10/17/2012), or 4.18 years		\$3,537,832
[13]	Total Pre-Judgment Interest:		\$5,206,438
	Less: Post-Default Interest Payments		
[14]	( - ) Interest Payments in April '08		\$88,075
[15]	( - ) Interest Payments in July '08		\$0
[16]	( - ) Interest Payments in Aug. '08		\$42,716
[17]	Total Post-Default Interest Payments		\$130,791
[18]	Damages		\$14,485,185
Notes	& Sources:		
[1]:	Workpaper MG-32, column [f].	10]:	Simple interest: 0.27 years x [3] x [8].
[2]:	Workpaper MG-30.	11]:	Simple interest: 0.06 years x [5] x [8].
[3]:		12]:	Simple interest: 4.18 years x [7] x [8].
[4]:	* *	13]:	[9] + [10] + [11] + [12].
[5]:		14]: 15]:	Workpaper MG-31. Workpaper MG-31.
[6]: [7]:		13]. 16]:	Workpaper MG-31.
[8]:		17]:	* *
[9]:	_	_	[7] + [13] - [17].

#### Workpaper MG-10 Commerzbank - DAF: Damages Calculation

	Purchase I	JSIP:	16705RAY0 5/15/2007
[1] [2]	CP Purchase Price:		\$44,996,402 \$8,292,681
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$36,703,721 \$16,936,310
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$19,767,412 \$2,918,704
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$16,848,707
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$2,016,077 \$884,500 \$102,078 \$6,334,838
[13]	Total Pre-Judgment Interest:		\$9,337,492
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$159,257 \$0 \$77,259 \$236,516
[18]	Damages		\$25,949,683
Notes [1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-30.  [1] - [2].  Workpaper MG-30.  [3] - [4].  Workpaper MG-30.  [5] - [6].  Per Counsel.  [5] - [6].	10]: 11]: 12]: 13]: 14]: 15]: 16]: 17]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

### Workpaper MG-11 Deutsche Postbank: Damages Calculation

	Purchase	USIP:	XS0280223289 12/20/2006
[1] [2]	MCN Purchase Price:  ( - ) Principal Distributions in April '08		\$20,000,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$20,000,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$20,000,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$20,000,000
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$896,106 \$481,967 \$103,279 \$7,519,672
[13]	Total Pre-Judgment Interest:		\$9,001,024
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$0 \$0 \$0 \$0
[18]	Damages		\$29,001,024
Notes	& Sources:		
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].  Workpaper MG-30.  [1] - [2].  Workpaper MG-30.  [3] - [4].  Workpaper MG-30.  [5] - [6].  Per Counsel.  Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51 for fraction of years calculation.	[10]: [11]: [12]: [13]: [14]: [15]: [16]: [17]: [18]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

### Workpaper MG-12 Deutsche Postbank: Damages Calculation

	Purchase	USIP:	XS0239377350 12/22/2005
[1] [2]	MCN Purchase Price:		\$17,500,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$17,500,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$17,500,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$17,500,000
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$784,093 \$421,721 \$90,369 \$6,579,713
[13]	Total Pre-Judgment Interest:		\$7,875,896
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$0 \$0 \$0 \$0
[18]	Damages		\$25,375,896
Notes	& Sources:		
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-30. [1] - [2]. Workpaper MG-30. [3] - [4]. Workpaper MG-30. [5] - [6]. Per Counsel.	[10]: [11]: [12]: [13]: [14]: [15]: [16]: [17]: [18]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

### Workpaper MG-13 Deutsche Postbank: Damages Calculation

	Face Value CUSIF Purchase Date Security	2: XS0280223875 2: 2/20/2007
[1] [2]	MCN Purchase Price:	\$20,000,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	\$20,000,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	\$20,000,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$20,000,000
[8]	Pre-Judgment Interest Rate	9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years	\$896,106 \$481,967 \$103,279 \$7,519,672
[13]	Total Pre-Judgment Interest:	\$9,001,024
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	\$0 \$0 \$0 \$0
[18]	Damages	\$29,001,024
Notes	& Sources:	
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].       [10]:         Workpaper MG-30.       [11]:         [1] - [2].       [12]:         Workpaper MG-30.       [13]:         [3] - [4].       [14]:         Workpaper MG-30.       [15]:         [5] - [6].       [16]:         Per Counsel.       [17]:         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18]:         for fraction of years calculation.	Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31.

### Workpaper MG-14 Florida State Board of Administration: Damages Calculation

	Face V		
	Purchase I	JSIP: Date:	
		urity:	
[1]	MTN Purchase Price:		\$24,982,703
[2]	( - ) Principal Distributions in April '08		\$4,624,483
[3]	Unrecovered Purchase Price at April '08: (04/16/2008)		\$20,358,220
[4]	(-) July '08 Distribution		\$9,442,840
[5]	Unrecovered Purchase Price at Liquidation: (07/23/2008)		\$10,915,380
[6]	(-) Principal Distributions in Aug. '08		\$1,627,640
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$9,287,740
[8]	Pre-Judgment Interest Rate		9.00%
[9]	(10/17/2007 To 04/16/2008), or 0.5 years		\$1,119,357
[10]	(04/16/2008 To 07/23/2008), or 0.27 years		\$490,600
[11]	(07/23/2008 To 08/13/2008), or 0.06 years		\$56,366
[12]	(08/13/2008 To 10/17/2012), or 4.18 years		\$3,492,038
[13]	Total Pre-Judgment Interest:		\$5,158,361
	Less: Post-Default Interest Payments		
[14]	( - ) Interest Payments in April '08		\$88,220
[15]	( - ) Interest Payments in July '08		\$0
[16]	( - ) Interest Payments in Aug. '08		\$42,763
[17]	Total Post-Default Interest Payments		\$130,983
[18]	Damages		\$14,315,118
Notes	& Sources:		
[1]:	Workpaper MG-32, column [f].	10]:	Simple interest: 0.27 years x [3] x [8].
[2]:		11]:	Simple interest: 0.06 years x [5] x [8].
[3]:		[12]:	Simple interest: 4.18 years x [7] x [8].
[4]:	* *	13]:	[9] + [10] + [11] + [12].
[5]:		14]:	Workpaper MG-31.
[6]: [7]:	* *	[15]: [16]:	Workpaper MG-31. Workpaper MG-31.
[8]:		17]:	[14] + [15] + [16].
[9]:			[7] + [13] - [17].
=	for fraction of years calculation.	-	

#### Workpaper MG-15 Florida State Board of Administration: Damages Calculation

	Purchase	USIP:	16705EAV5 2/10/2006
[1] [2]	MTN Purchase Price:		\$24,980,635 \$4,614,077
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008) ( - ) July '08 Distribution		\$20,366,558 \$9,421,415
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$10,945,143 \$1,623,977
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$9,321,166
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$1,119,265 \$490,801 \$56,520 \$3,504,606
[13]	Total Pre-Judgment Interest:		\$5,171,191
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$87,964 \$0 \$42,633 \$130,597
[18]	Damages		\$14,361,759
Notes [1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-30. [1] - [2]. Workpaper MG-30. [3] - [4]. Workpaper MG-30. [5] - [6]. Per Counsel.	[10]: [11]: [12]: [13]: [14]: [15]: [16]: [17]: [18]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

#### Workpaper MG-16 Gulf International Bank: Damages Calculation

	Purchase	Value: CUSIP: e Date: curity:	xs0224123538 8/3/2005
[1] [2]	MCN Purchase Price:  ( - ) Principal Distributions in April '08		\$15,000,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$15,000,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$15,000,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$15,000,000
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$672,079 \$361,475 \$77,459 \$5,639,754
[13]	Total Pre-Judgment Interest:		\$6,750,768
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$0 \$0 \$0 \$0
	Damages		\$21,750,768
Notes [1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	& Sources:  Workpaper MG-32, column [f].  Workpaper MG-30.  [1] - [2].  Workpaper MG-30.  [3] - [4].  Workpaper MG-30.  [5] - [6].  Per Counsel.  Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51 for fraction of years calculation.	[10]: [11]: [12]: [13]: [14]: [15]: [16]: [17]: [18]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

## Workpaper MG-17 King County, Washington: Damages Calculation

	Face Value CUSIP Purchase Date Security	: 16705RBC7 : 4/18/2007
[1] [2]	CP Purchase Price:	\$48,688,083 \$9,125,000
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	\$39,563,083 \$18,177,838
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	\$21,385,246 \$3,211,648
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$18,173,597
[8]	Pre-Judgment Interest Rate	9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years	\$2,181,484 \$953,405 \$110,432 \$6,832,975
[13]	Total Pre-Judgment Interest:	\$10,078,296
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	\$245,251 \$753,088 \$143,070 \$1,141,409
[18]	Damages	\$27,110,485
Notes	& Sources:	
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]:	Workpaper MG-32, column [f].       [10]:         Workpaper MG-30.       [11]:         [1] - [2].       [12]:         Workpaper MG-30.       [13]:         [3] - [4].       [14]:         Workpaper MG-30.       [15]:         [5] - [6].       [16]:         Per Counsel.       [17]:         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18]:         for fraction of years calculation.	[9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31.

### Workpaper MG-18 National Agricultural Cooperative Federation: Damages Calculation

	Face Va CU Purchase D Secu	SIP: Oate:	xs0224122563 8/3/2005
[1] [2]	MCN Purchase Price:		\$10,000,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$10,000,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$10,000,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$10,000,000
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$448,053 \$240,984 \$51,639 \$3,759,836
[13]	Total Pre-Judgment Interest:		\$4,500,512
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$0 \$0 \$0 \$0
[18]	Damages		\$14,500,512
Notes	& Sources:		
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]:	Workpaper MG-30.       [1]         [1] - [2].       [2]         Workpaper MG-30.       [3]         [3] - [4].       [3]         Workpaper MG-30.       [3]         [5] - [6].       [3]         Per Counsel.       [3]	10]: 11]: 12]: 13]: 14]: 15]: 16]: 17]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

#### Workpaper MG-19 Global Investment Services Ltd. (New Zealand): Damages Calculation

	Face Value CUSIP Purchase Date Security	: xs0224125236 : 8/3/2005
[1] [2]	MCN Purchase Price:	\$1,690,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	\$1,690,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	\$1,690,000 \$0
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$1,690,000
[8]	Pre-Judgment Interest Rate	9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years	\$75,721 \$40,726 \$8,727 \$635,412
[13]	Total Pre-Judgment Interest:	\$760,587
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	\$0 \$0 \$0 \$0
[18]	Damages	\$2,450,587
Notes	& Sources:	
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].       [10]:         Workpaper MG-30.       [11]:         [1] - [2].       [12]:         Workpaper MG-30.       [13]:         [3] - [4].       [14]:         Workpaper MG-30.       [15]:         [5] - [6].       [16]:         Per Counsel.       [17]:         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18]:         for fraction of years calculation.	Workpaper MG-31. Workpaper MG-31. Workpaper MG-31.

#### Workpaper MG-20 Global Investment Services Ltd. (New Zealand): Damages Calculation

	Face Value CUSIP Purchase Date Security	xs0283817434 : 1/23/2007
[1] [2]	MCN Purchase Price:	\$2,000,000 \$0
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	\$2,000,000 \$0
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	\$2,000,000
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$2,000,000
[8]	Pre-Judgment Interest Rate	9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years	\$89,611 \$48,197 \$10,328 \$751,967
[13]	Total Pre-Judgment Interest:	\$900,102
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	\$0 \$0 \$0 \$0
[18]	Damages	\$2,900,102
Notes	& Sources:	
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].       [10]:         Workpaper MG-30.       [11]:         [1] - [2].       [12]:         Workpaper MG-30.       [13]:         [3] - [4].       [14]:         Workpaper MG-30.       [15]:         [5] - [6].       [16]:         Per Counsel.       [17]:         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18]:         for fraction of years calculation.	[9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31.

## Workpaper MG-21 Pennsylvania Public School Employee Retirement System: Damages Calculation

	C Purchase	Value: CUSIP: e Date: curity:	16705EFB4 5/21/2007
[1] [2]	MTN Purchase Price:		\$9,998,039 \$1,847,005
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$8,151,034 \$3,679,404
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$4,471,630 \$650,075
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$3,821,555
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$447,965 \$196,427 \$23,091 \$1,436,842
[13]	Total Pre-Judgment Interest:		\$2,104,325
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$41,137 \$109,844 \$20,414 \$171,395
[18]	Damages		\$5,754,486
Notes [1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	& Sources:  Workpaper MG-32, column [f].  Workpaper MG-30.  [1] - [2].  Workpaper MG-30.  [3] - [4].  Workpaper MG-30.  [5] - [6].  Per Counsel.  Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51 for fraction of years calculation.	[10]: [11]: [12]: [13]: [14]: [15]: [16]: [17]: [18]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

#### Workpaper MG-22 SEI Investments Co: Damages Calculation

	Face Valu CUSI Purchase Dat Securit	P: 16705ECW1 e: 10/25/2006
[1] [2]	MTN Purchase Price:	\$49,995,000 \$9,237,848
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	\$40,757,152 \$18,853,722
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	\$21,903,430 \$3,251,367
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$18,652,063
[8]	Pre-Judgment Interest Rate	9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years	\$2,240,041 \$982,181 \$113,108 \$7,012,870
[13]	Total Pre-Judgment Interest:	\$10,348,199
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	\$173,357 \$0 \$83,632 \$256,989
[18]	Damages	\$28,743,273
Notes	& Sources:	
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].       [10]         Workpaper MG-30.       [11]         [1] - [2].       [12]         Workpaper MG-30.       [13]         [3] - [4].       [14]         Workpaper MG-30.       [15]         [5] - [6].       [16]         Per Counsel.       [17]         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18]         for fraction of years calculation.       [18]	<ul> <li>Simple interest: 0.06 years x [5] x [8].</li> <li>Simple interest: 4.18 years x [7] x [8].</li> <li>[9] + [10] + [11] + [12].</li> <li>Workpaper MG-31.</li> <li>Workpaper MG-31.</li> <li>Workpaper MG-31.</li> </ul>

### Workpaper MG-23 SEI Investments Co: Damages Calculation

	Face Valu CUS Purchase Da Securi	IP: te:	\$125,000,000 16705EDU4 1/25/2007 MTN
[1] [2]	MTN Purchase Price:	_	\$124,969,450 \$23,106,479
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	_	\$101,862,971 \$47,154,945
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	_	\$54,708,026 \$8,132,591
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$46,575,435
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$5,599,294 \$2,454,731 \$282,509 \$17,511,600
[13]	Total Pre-Judgment Interest:	_	\$25,848,133
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	_	\$432,454 \$0 \$208,511 \$640,965
[18]	Damages		\$71,782,604
Notes	& Sources:		
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].       [10         Workpaper MG-30.       [11         [1] - [2].       [12         Workpaper MG-30.       [13         [3] - [4].       [14         Workpaper MG-30.       [15         [5] - [6].       [16         Per Counsel.       [17         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18         for fraction of years calculation.       [18	];	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

#### Workpaper MG-24 SEI Investments Co: Damages Calculation

	C Purchase	Value: CUSIP: Date: curity:	16705EEM1 3/26/2007
[1] [2]	MTN Purchase Price:		\$96,973,849 \$17,767,330
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008) ( - ) July '08 Distribution		\$79,206,519 \$36,258,298
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$42,948,221 \$6,253,416
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$36,694,805
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$4,344,942 \$1,908,747 \$221,782 \$13,796,645
[13]	Total Pre-Judgment Interest:		\$20,272,117
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$332,305 \$0 \$160,200 \$492,505
	Damages & Saurage		\$56,474,417
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	& Sources:  Workpaper MG-32, column [f].  Workpaper MG-30. [1] - [2].  Workpaper MG-30. [3] - [4].  Workpaper MG-30. [5] - [6].  Per Counsel.  Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51 for fraction of years calculation.	[10]: [11]: [12]: [13]: [14]: [15]: [16]: [17]: [18]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

### Workpaper MG-25 SEI Investments Co: Damages Calculation

	Face Valu CUSI Purchase Dat Securit	P: 16705EEZ2 e: 5/15/2007
[1] [2]	MTN Purchase Price:	\$9,997,549 \$1,835,335
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	\$8,162,214 \$3,745,491
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	\$4,416,723 \$645,967
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$3,770,756
[8]	Pre-Judgment Interest Rate	9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years	\$447,943 \$196,696 \$22,808 \$1,417,742
[13]	Total Pre-Judgment Interest:	\$2,085,189
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	\$34,350 \$0 \$16,519 \$50,869
[18]	Damages	\$5,805,076
Notes	& Sources:	
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].       [10]         Workpaper MG-30.       [11]         [1] - [2].       [12]         Workpaper MG-30.       [13]         [3] - [4].       [14]         Workpaper MG-30.       [15]         [5] - [6].       [16]         Per Counsel.       [17]         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18]         for fraction of years calculation.       [18]	Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31.

#### Workpaper MG-26 SEI Straegies LLC: Damages Calculation

	Face Value CUSIF Purchase Date Security	2: 16705EEJ8 2: 3/20/2007
[1] [2]	MTN Purchase Price:	\$49,990,610 \$9,165,095
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution	\$40,825,515 \$18,716,642
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	\$22,108,873 \$3,225,760
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)	\$18,883,113
[8]	Pre-Judgment Interest Rate	9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years	\$2,239,844 \$983,828 \$114,169 \$7,099,741
[13]	Total Pre-Judgment Interest:	\$10,437,582
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	\$175,550 \$0 \$85,119 \$260,669
[18]	Damages	\$29,060,026
Notes	& Sources:	
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]:	Workpaper MG-32, column [f].       [10]:         Workpaper MG-30.       [11]:         [1] - [2].       [12]:         Workpaper MG-30.       [13]:         [3] - [4].       [14]:         Workpaper MG-30.       [15]:         [5] - [6].       [16]:         Per Counsel.       [17]:         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18]:         for fraction of years calculation.	Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31.

#### Workpaper MG-27 SEI Straegies LLC: Damages Calculation

	Face Val CUS Purchase D Secur	SIP: ate:	\$50,000,000 16705EFF5 6/20/2007 MTN
[1] [2]	MTN Purchase Price:		\$49,992,625 \$9,164,755
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$40,827,870 \$18,716,657
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08		\$22,111,213 \$3,225,641
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$18,885,572
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$2,239,935 \$983,885 \$114,181 \$7,100,665
[13]	Total Pre-Judgment Interest:		\$10,438,666
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments		\$175,774 \$0 \$85,250 \$261,024
	Damages		\$29,063,213
Notes [1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-30.       [1         [1] - [2].       [1         Workpaper MG-30.       [1         [3] - [4].       [1         Workpaper MG-30.       [1         [5] - [6].       [1         Per Counsel.       [1	4]: 5]: 6]: 7]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

## Workpaper MG-28 SFT Collective Investment Fund: Damages Calculation

	Face V CU Purchase I	JSIP:	16705EEQ2	
	Seco	urity:	MTN	
[1] [2]	MTN Purchase Price:  ( - ) Principal Distributions in April '08		\$49,965,455 \$9,141,049	
[4]	(-) Trincipal Distributions in 71pm 00		Ψ,111,017	
[3]	Unrecovered Purchase Price at April '08: (04/16/2008)		\$40,824,406	
[4]	(-) July '08 Distribution		\$18,668,597	
[5]	Unrecovered Purchase Price at Liquidation: (07/23/2008)		\$22,155,809	
[6]	( - ) Principal Distributions in Aug. '08		\$3,217,297	
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$18,938,511	
[8]	Pre-Judgment Interest Rate		9.00%	
[9]	(10/17/2007 To 04/16/2008), or 0.5 years		\$2,238,717	
[10]	(04/16/2008 To 07/23/2008), or 0.27 years		\$983,801	
[11]	(07/23/2008 To 08/13/2008), or 0.06 years		\$114,411	
[12]	(08/13/2008 To 10/17/2012), or 4.18 years		\$7,120,570	
[13]	Total Pre-Judgment Interest:		\$10,457,499	
	Less: Post-Default Interest Payments			
[14]	(-) Interest Payments in April '08		\$175,435	
[15]	( - ) Interest Payments in July '08		\$0	
[16]	(-) Interest Payments in Aug. '08		\$85,096	
[17]	Total Post-Default Interest Payments		\$260,531	
[18]	Damages		\$29,135,480	
Notes & Sources:				
[1]:	Workpaper MG-32, column [f].	[10]:	Simple interest: 0.27 years x [3] x [8].	
[2]:	* *	[11]:	Simple interest: 0.06 years x [5] x [8].	
[3]:		[12]:	Simple interest: 4.18 years x [7] x [8].	
[4]:	* *	[13]:	[9] + [10] + [11] + [12]. Workpaper MG 31	
[5]: [6]:		[14]: [15]:	Workpaper MG-31. Workpaper MG-31.	
[7]:		16]:	Workpaper MG-31.	
[8]:		17]:	* *	
[9]:	Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51 for fraction of years calculation.	[18]:	[7] + [13] - [17].	

# Workpaper MG-29 SFT Collective Investment Fund: Damages Calculation

	Face Valu CUS Purchase Da Securi	IP: te:	\$50,000,000 16705EEV1 4/20/2007 MTN
[1] [2]	MTN Purchase Price:		\$49,965,550 \$9,245,402
[3] [4]	Unrecovered Purchase Price at April '08: (04/16/2008)  ( - ) July '08 Distribution		\$40,720,148 \$18,881,713
[5] [6]	Unrecovered Purchase Price at Liquidation: (07/23/2008)  ( - ) Principal Distributions in Aug. '08	_	\$21,838,435 \$3,254,025
[7]	Unrecovered Purchase Price after Dissolution: (08/13/2008)		\$18,584,410
[8]	Pre-Judgment Interest Rate		9.00%
[9] [10] [11] [12]	(10/17/2007 To 04/16/2008), or 0.5 years (04/16/2008 To 07/23/2008), or 0.27 years (07/23/2008 To 08/13/2008), or 0.06 years (08/13/2008 To 10/17/2012), or 4.18 years		\$2,238,721 \$981,289 \$112,772 \$6,987,434
[13]	Total Pre-Judgment Interest:		\$10,320,216
[14] [15] [16] [17]	Less: Post-Default Interest Payments  ( - ) Interest Payments in April '08  ( - ) Interest Payments in July '08  ( - ) Interest Payments in Aug. '08  Total Post-Default Interest Payments	_	\$177,437 \$0 \$86,068 \$263,505
[18]	Damages		\$28,641,121
Notes	& Sources:		
[1]: [2]: [3]: [4]: [5]: [6]: [7]: [8]: [9]:	Workpaper MG-32, column [f].       [10         Workpaper MG-30.       [11         [1] - [2].       [12         Workpaper MG-30.       [13         [3] - [4].       [14         Workpaper MG-30.       [15         [5] - [6].       [16         Per Counsel.       [17         Simple interest: 0.5 years x [8] x [1]. See Workpaper MG-51       [18         for fraction of years calculation.       [18	]:	Simple interest: 0.27 years x [3] x [8]. Simple interest: 0.06 years x [5] x [8]. Simple interest: 4.18 years x [7] x [8]. [9] + [10] + [11] + [12]. Workpaper MG-31. Workpaper MG-31. Workpaper MG-31. [14] + [15] + [16]. [7] + [13] - [17].

Workpaper MG-30 Post Default Principal Distributions

[1] Abstitubable Commercial Bank         8,72,000         ACCORDAND         NA         0.00         NA         0.00           [2] Bank Stember         10,5000         6,75,000         6,75,000         6,75,000         6,75,000         7,70,000         7,00         0.00           [3] Bank Stember         10,5000         6,75,000         6,75,000         6,75,000         NA         0.00		Plaintiff	Date of Purchase	CUSIP	Security Purchased	April Principal (\$)	Source	July Principal / Gryphon Equivalent (\$)	Source	August Principal (\$)	Source
Designation of the compact part of the compa	Ξ	Ahu Dhohi Commaraid Bank	5000/8/8	VS///////	MCM	00 0	*/N	000	V/N		* Z
Busk Singles         Tol. One         Incidented         NA         0.00           Busk Singles         Brank Singles         10,2006         (FOSEISSS)         MINN         9,158,61         BIFTD-HOUZE         10,00         Minnerhold         10,00           Busterfield         12,42006         (FOSEISSN)         (FOSEISSN)         MINN         9,158,61         BIFTD-HOUZE         15,00         Minnerhold         10,00           Commerchank         6,52007         (FOSEISTN)         RTR         9,145,28         CEB000000         15,650,20         Minchage Mode         10,00           Commerchank         6,52007         (FOSEISTN)         RTR         9,145,28         CEB000000         15,69,29         Minchage Mode         10,00           Desirable Pochunk         1,20,200         SYSTORY SYSTS         MCN         0,00         N/A         0,00         N/A         0,00           Desirable Pochunk         1,20,200         SYSTORY SYSTS         MCN         0,00         N/A         0,00         N/A         0,00           Desirable Pochunk         1,20,200         SYSTORY SYSTS         MCN         0,00         N/A         0,00         N/A         0,00           Desirable Pochunk         1,00         SYSTORY SYSTS	[2]	Bank Hanoalim	9/26/2006	16705ECD3	MCN	0.00	N/A	0.00	7/X		N/A
Butterfield         TOTOMOR         CONDENSY         INTRODUCTOR	[3]	Bank SinoPac	10/3/2005	xs0230885500	MCN	0.00	N/A	0.00	//N		N/A
Butterfield         Sign of the control of the co	4	Butterfield	7/7/2006	16705EBY8	MTM	9,158,611	BTFDe0002764	18,818,513	Workpaper MG-35		Workpaper MG-33
Commerchank         12,020         (NTSDEDIS         MIN         9.146.00         NA         0.00         NA         0.00           Commerchank         41/6,000         16/05EET         MIN         9.145.28         CEB0000003         18.654.20         Workpaper MG-38         1.06.20           Commerchank         6.000         MIN         4.90.2145         CEB0000001         18.93.89         Workpaper MG-38         1.06.20           Commerchank         5.15.200         KISSDON         CRESSANT         CP         8.20.48         CRESSAND         Workpaper MG-38         1.00.00           Descript Portlank         1.220.200         XSIZSAND         MCN         0.00         NA         0.00         NA         0.00           Descript Portlank         1.220.200         XSIZSAND         MCN         0.00         NA         0.00         NA         0.00           Descript Portlank         1.220.200         KSIZSAND         MCN         0.00         NA         0.00         NA         0.00           Descript Portlank         MCN         0.00         NA         4.624.83         Workpaper MG-34         Workpaper MG-34         1.623.00           Evril Sales Board of Administration         2.10.2006         16.70.5EA.07         M	[5]	Butterfield	5/14/2007	16705MYD1	Cb	9,097,842	BTFDe0002764	18,769,855	Workpaper MG-36		Workpaper MG-50
Commerchants         416,2007         fortSEPD         MIN         9,94,2153         CD000000         18,632,200         Workpaper MG-38         3,500.20           Commerchants         65,2007         fortSEPD         MIN         9,94,2153         CD000000         16,956,310         Workpaper MG-38         2,500.20           Commerchants         51,200.00         SNGS027333         MCN         0.00         NA         0.00         NA         0.00           Descripte Perchants         12,200.00         SNGS027333         MCN         0.00         NA         0.00         NA         0.00           Descripte Perchants         12,200.00         SNGS0273333         MCN         0.00         NA         0.00         NA         0.00           Descripte Perchants         2,000.00         SNGS0273333         MCN         0.00         NA         0.00         NA         0.00           Postaciale Perchants         2,000.00         10,005EAV3         MTN         4,614,07         Workpaper MG-44         1,623,60         1,623,60           Ford Commerchants         2,000.00         10,005EAV3         MCN         0.00         NA         0.00         NA         0.00           Sing Complex Complex Perchants         SNA         0.00 <td>[9]</td> <td>Commerzbank</td> <td>12/4/2006</td> <td>16705EDH3</td> <td>MCN</td> <td>0.00</td> <td>N/A</td> <td>00:0</td> <td>//N</td> <td></td> <td>N/A</td>	[9]	Commerzbank	12/4/2006	16705EDH3	MCN	0.00	N/A	00:0	//N		N/A
Commerchante         65-2007         16105REWO         NN         4.92,183         CROBO0000         163-26-30         Notepaper MG-3-38         16,05-20           Commerchante         152-2000         1515-2007         16105REWYO         NN         0.00         NN         0.00         NN         0.00           Detacted Peathank         122-2000         SKR082123853         MCN         0.00         NA         0.00         NA         0.00           Detacted Peathank         122-2000         SKR083123853         MCN         0.00         NA         0.00         NA         0.00           Detacted Peathank         220,2007         SKR083213853         MCN         0.00         NA         0.00         NA         0.00           Florid State Board of Administration         210,2006         16705RAN3         MCN         0.00         NA         0.00         NA         0.00           King Councy, Vestington         Activated Peathan         87,2006         507581213286         MCN         0.00         NA         0.00         NA         0.00           Gold Investment Service LIQ (New Zealind)         87,2006         507581213286         MCN         0.00         NA         0.00         NA         0.00           Gold		Commerzbank	4/16/2007	16705EET6	MTM	9,134,528	CB0000002	18,654,220	Workpaper MG-37		CB0000002
Desiroche Potchank   20,00006   50,50000   1,005,600	[8]	Commerzbank	6/5/2007	16705EFD0	MTM	4,592,155	CB0000003	9,378,296	Workpaper MG-38		CB0000003
Desirable by Coloring Michael Broad of Administration         12020006         SNOSS9223575         MCN         0.00         NA         0.00         NA         0.00           Destroke Postbank         12202007         SNOSS9235756         MCN         0.00         NA         0.00         NA         0.00           Destroke Postbank         12202007         SS023923575         MCN         0.00         NA         0.00         NA         0.00           Proids State Band of Administration         21/12006         16705EAV2         MCN         4,614,07         Workpaper MG-43         9,412,840         Workpaper MG-40         1,627,640           Robal Investment on Blank         8,72005         3,8224122538         MCN         0.00         NA         0.00         NA         0.00           National Agricultural Congenitary Education         8,72005         3,822412253         MCN         0.00         NA         0.00         NA         0.00           Global Investment Services Lid (New Zealand)         8,72005         3,822412553         MCN         0.00         NA         0.00         NA         0.00           Global Investment Services Lid (New Zealand)         8,72006         3,82241253         MCN         0.00         NA         0.00         NA <t< td=""><td>[6]</td><td>Commerzbank</td><td>5/15/2007</td><td>16705RAY0</td><td>C</td><td>8,292,681</td><td>CB0000001</td><td>16,936,310</td><td>Workpaper MG- 39</td><td></td><td>CB0000001</td></t<>	[6]	Commerzbank	5/15/2007	16705RAY0	C	8,292,681	CB0000001	16,936,310	Workpaper MG- 39		CB0000001
Desiretche Posthank         12222004         SNR239377359         MCN         0.00         NA         0.00         NA         0.00           Postische Posthank         2202007         SNR29023877359         MCN         0.00         NA         0.00         NA         0.00           Florida State Board of Administration         21/20006         16705EAV         MTN         4,624,483         Workpaper MG-33         9,421,415         Workpaper MG-40         1,625,607           Rodal International Bank Ministration         21/20006         8,220,412338         MTN         4,614,677         Workpaper MG-41         1,625,977         0.00           King County, Weshington         4,18,2007         16705EBC7         CP         9,125,000         NA         0.00         NA         0.00           King County, Weshington         4,18,2007         16705EBC7         CP         9,125,000         NA         0.00         NA         0.00           Global Investment Services Lid (New Zealand)         11,23,007         16705EBCA         MTN         1,184,007         NA         0.00         NA         0.00           Global Investments School Employee Retirement System         11,23,007         16705EBCA         MTN         1,184,007         NA         0.00         NA	[10]	Deutsche Postbank	12/20/2006	XS0280223289	MCN	0.00	N/A	0.00	/N		N/A
Point State Board of Administration		Deutsche Postbank	12/22/2005	XS0239377350	MCN	00.00	N/A	0.00	√/N		N/A
Fordita State Board of Administration   21/2006   1670SEAU7   MIN   4,624,483   Workpaper MG-33   9,442,840   Workpaper MG-30   1,627,64	[12]	Deutsche Postbank	2/20/2007	XS0280223875	MCN	00.00	N/A	0.00	√/N		N/A
FSBA-dol10008937,   FSBA-dol1000894,   FSBA-dol100894,   FSBA-do	[13]	Florida State Board of Administration	2/1/2006	16705EAU7	NTM	4,624,483	FSBAe0010008937, Workpaper MG-33	9,442,840	Workpaper MG-40		FSBAe001008937. See Workpaper MG-33
Fond State Board of Administration   2/10/2006   16705EAV5   MTN   4,614,077   Workpaper MG-43   1,623     Gulf International Bank   8/3/2005   x3024123538   MCN   0.00   NA   0.00   N							FSBAe0010008937,				FSBAe0010008937, pg.
Cull International Bank         8/3/2005         x,8024123538         MCN         0.00         N/A         0.00         N/A         3,21           Atting County, Washington Arting Cou	[14]	Florida State Board of Administration	2/10/2006	16705EAV5	MTM	4,614,077	pg. 2, Workpaper MG-33	9,421,415	Workpaper MG-41		2, Workpaper MG-33
King County, Washington         4/18/2007         16/05/BBC7         CP         9,125,000         KC60000259         18,177,838         KC00000896-897         3,211           National Agricultural Cooperative Federation         8/3/2005         xs0224122553         MCN         0.00         N/A         0.00 <t< td=""><td>[15]</td><td>GulfInternational Bank</td><td>8/3/2005</td><td>xs0224123538</td><td>MCN</td><td>0.00</td><td>N/A</td><td>0.00</td><td>//N</td><td></td><td>N/A</td></t<>	[15]	GulfInternational Bank	8/3/2005	xs0224123538	MCN	0.00	N/A	0.00	//N		N/A
National Agricultural Cooperative Federation         8/3/2005         xx0224122563         MCN         0.00         N/A         0.00         N/A           Global Investment Services Ltd. (New Zealand)         13/2007         xx0224122563         MCN         0.00         N/A         0.00         N/A           Global Investment Services Ltd. (New Zealand)         12/32007         xx0281744         MCN         0.00         N/A         0.00         N/A           Pennsylvania Public School Employee Retirement System         5/21/2007         16/705EPB         MTN         1,847,005         PSERS0000001         3,679,404         PSERS0000001         650           SEI Investments Co         1025/2007         16/705EDU4         MTN         23,106,479         SE10000008         47,154,945         Workpaper MG-42         3,231           SEI Investments Co         1/25/2007         16/705EDU4         MTN         1,767,330         SE10001310         36,258,298         Workpaper MG-43         6,253           SEI Investments Co         5/15/2007         16/705EEZ         MTN         1,767,330         SE10011311         18/16,642         Workpaper MG-43         3,228           SEI Investments Co         5/15/2007         16/705EEZ         MTN         1,650,699         SE10011311         18/16,642	[16]	King County, Washington	4/18/2007	16705RBC7	Cb	9,125,000	KCe0000259	18,177,838	KC00000896-897		KCe0013713
Global Investment Services Ltd (New Zealand)   8/3/2005   xs022412536   MCN   0.00   N/A   0.0	[17]	National Agricultural Cooperative Federation	8/3/2005	xs0224122563	MCN	0.00	N/A	0.00	√/N		N/A
Global Investment Services Ltd (New Zealand)   1/23/2007   x50283817434   MCN   0.000   N/A   0.000   0.00	[18]	Global Investment Services Ltd. (New Zealand)	8/3/2005	xs0224125236	MCN	00.00	N/A	0.00	//N		N/A
Pennsylvania Public School Employee Retirement System         5/21/2007         1670SECW1         MTN         1,847,005         PSERS0000001         3,679,404         PSERS0000001           SEI Investments Co         10,25/2006         1670SECW1         MTN         23,106,479         SE10000008         47,154,945         Workpaper MG-43           SEI Investments Co         1/25/2007         1670SEDU4         MTN         23,106,479         SE10000008         47,154,945         Workpaper MG-43           SEI Investments Co         3/26/2007         1670SEEM1         MTN         17,767,330         FED011310, Avchpaper MG-33         37,45,491         Workpaper MG-44           SEI Investments Co         5/15/2007         1670SEEZZ         MTN         1,835,335         Workpaper MG-33         3,745,491         Workpaper MG-45           SEI Straegies LLC         5/15/2007         1670SEEZZ         MTN         9,165,095         SEIO011311         18,716,642         Workpaper MG-45           SFI Straegies LLC         6/20/2007         1670SEEZZ         MTN         9,164,755         SEIO011311         18,716,642         Workpaper MG-45           SFI Collective Investment Fund         4/4/2007         1670SEEZZ         MTN         9,164,755         SEIO011311         18,686,597         Workpaper MG-45	[19]	Global Investment Services Ltd. (New Zealand)	1/23/2007	xs0283817434	MCN	0.00	N/A	0.00	√/N		N/A
SEI Investments Co         10.25/2006         16705EDU4         MTN         9,237,848         SE10000008         18,853,722         Workpaper MG-42           SEI Investments Co         1/25/2007         16705EDU4         MTN         23,106,479         SE10000008         47,154,945         Workpaper MG-43           SEI Investments Co         3/26/2007         16705EEM1         MTN         17,767,330         SE10011310, For \$97 mm)         36,258,298         Workpaper MG-44           SEI Investments Co         5/15/2007         16705EEZ2         MTN         1,835,335         Workpaper MG-33, Workpaper MG-33, Workpaper MG-45         Workpaper MG-45           SEI Straegies LLC         3/20/2007         16705EEZ2         MTN         9,165,095         Workpaper MG-33, SE10011311         18,716,642         Workpaper MG-45           SEI Straegies LLC         6/20/2007         16705EEZ3         MTN         9,164,755         SE10011311         18,716,642         Workpaper MG-43           SFT Collective Investment Fund         4/4/2007         16705EEZ3         MTN         9,141,049         ESEC0000263         18,668,597         Workpaper MG-48           SFT Collective Investment Fund         4/20/2007         16705EEV3         MTN         9,245,402         ESEC0000263         18,881,713         Workpaper MG-48	[20]	Pennsylvania Public School Employee Retirement System	5/21/2007	16705EFB4	NTM	1,847,005	PSERS0000001	3,679,404	PSERS000000		PSERS000001
SEI Investments Co         1/25/2007         1670SEDU4         MTN         23,106,479         SEI0000008         47,154,945         Workpaper MG-43           SEI Investments Co         3/26/2007         1670SEEM1         MTN         17,767,330         SEI0011310, 17,767,330         36,258,298         Workpaper MG-44           SEI Straegies LLC         5/15/2007         1670SEE/2         MTN         1,835,335         Workpaper MG-33, 37,45,491         Workpaper MG-45           SEI Straegies LLC         6/20/2007         1670SEE/3         MTN         9,165,095         SEI0011311         18,716,642         Workpaper MG-45           SEI Straegies LLC         6/20/2007         1670SEE/3         MTN         9,164,755         SEI0011311         18,716,642         Workpaper MG-44           SFIT Collective Investment Fund         4/4/2007         1670SEE/2         MTN         9,164,755         SEI0011311         18,716,642         Workpaper MG-48           SFIT Collective Investment Fund         4/4/2007         1670SEE/2         MTN         9,141,049         ESEC0000263         18,668,597         Workpaper MG-49           SFIT Collective Investment Fund         4,20/2007         1670SEE/2         MTN         9,245,402         ESEC0000263         18,881,713         Workpaper MG-43	[21]	SEI Investments Co	10/25/2006	16705ECW1	NIM	9,237,848	SE10000008	18,853,722	Workpaper MG-42		Workpaper MG-33, SEI0011310
SEI Investments Co   3/26/2007   16705EEM1   MTN   17,767,330   for \$97 mm)   36,258,298   Workpaper MG-44     SEI Investment Co   5/15/2007   16705EEM2   MTN   1,835,335   Workpaper MG-33   3,745,491   Workpaper MG-45     SEI Straegies LLC   6/20/2007   16705EF5   MTN   9,165,095   SEI0011311   18,716,642   Workpaper MG-34     SEI Straegies LLC   6/20/2007   16705EF5   MTN   9,164,755   SEI0011311   18,716,657   Workpaper MG-45     SFI Collective Investment Fund   4,420,007   16705EEV1   MTN   9,245,402   ESEC000263   18,668,597   Workpaper MG-48     SFI Collective Investment Fund   4,20,2007   16705EEV1   MTN   9,245,402   ESEC000263   18,881,713   Workpaper MG-49	[22]	SEI Investments Co	1/25/2007	16705EDU4	MTM	23,106,479	SEI0000008	47,154,945	Workpaper MG-43		Workpaper MG-33, SEI0011310
SEI Investments Co   S/15/2007   1670SEEZ2   MTN   1,835,335   Workpaper MG-33   3,745,491   Workpaper MG-45     SEI Straegies LLC   S/20/2007   1670SEEY3   MTN   S/16,605   SEI0011311   18,716,642   Workpaper MG-45     SEI Straegies LLC   S/20/2007   1670SEEY3   MTN   S/16,755   SEI0011311   18,716,657   Workpaper MG-47     SFI Collective Investment Fund   4,420,2007   1670SEEV1   MTN   S/245,402   ESEC000263   18,668,597   Workpaper MG-48     SFI Collective Investment Fund   4,20,2007   1670SEEV1   MTN   S/245,402   ESEC000263   18,881,713   Workpaper MG-48     SFI Collective Investment Fund   4,20,2007   1670SEEV1   MTN   S/245,402   ESEC000263   18,881,713   Workpaper MG-49	[23]		3/26/2007	16705EEM1	NTM	_	Workpaper MG-33, E10000008 (grossed up for \$97 mm)	36,258,298	Workpaper MG-44		Workpaper MG-33, SEI0011310
SEI Straegies LLC         3/20/2007         1670SEE18         MTN         9,165,095         SEI0011311         18,716,642         Workpaper MG-46           SEI Straegies LLC         6/20/2007         1670SEFF3         MTN         9,164,755         SE10011311         18,716,657         Workpaper MG-47           SFT Collective Investment Fund         4/4/2007         1670SEEV1         MTN         9,141,049         ESEC0000263         18,668,397         Workpaper MG-48           SFT Collective Investment Fund         4/20/2007         1670SEEV1         MTN         9,245,402         ESEC000263         18,688,397         Workpaper MG-48	[24]		5/15/2007	16705EEZ2	MTN	1,835,335	SEI0011310, Workpaper MG-33	3,745,491	Workpaper MG-45		Workpaper MG-33, SEI0011310
SEI Straegies LLC         6/20/2007         1670SEFF3         MTN         9,164,755         SEI0011311         18,716,657         Workpaper MG-47           SFT Collective Investment Fund         4/4/2007         1670SEEV1         MTN         9,141,049         ESEC0000263         18,668,397         Workpaper MG-48           SFT Collective Investment Fund         4/20/2007         1670SEEV1         MTN         9,245,402         ESEC000263         18,681,713         Workpaper MG-49	[25]	SEI Straegies LLC	3/20/2007	16705EEJ8	NTM	9,165,095	Workpaper MG-33, SE10011311	18,716,642	Workpaper MG-46		Workpaper MG-33, SEI0011311
SFT Collective Investment Fund         4/4/2007         16705EEQ2         MTN         9,141,049         ESEC000263         18,668,397         Workpaper MG-48           SFT Collective Investment Fund         4/20/2007         16705EEV1         MTN         9,245,402         ESEC0000263         18,881,713         Workpaper MG-49	[26]	SEI Straegies LLC	6/20/2007	16705EFF5	MTN	9,164,755	Workpaper MG-33, SEI0011311	18,716,657	Workpaper MG-47		Workpaper MG-33, SEI0011311
SFT Collective Investment Fund 4/20/2007 16705EEV1 MTN 9,245,402 ESEC0000263 18,881,713 Workpaper MG-49	[27]	SFT Collective Investment Fund	4/4/2007	16705EEQ2	MTM	9,141,049	ESEC0000263	18,668,597	Workpaper MG-48		ESEC0000263
	[28]	SFT Collective Investment Fund	4/20/2007	16705EEV1	MTN	9,245,402	ESEC0000263	18,881,713	Workpaper MG-49		ESEC0000263

Workpaper MG-31 Post-Default Interest Payments

	Plaintiff	Date of Purchase	CUSIP	Security Purchased	April Interest (S)	Source	July Interest (S)	Source	August Interest (\$)	Source
Ξ	Abu Dhabi Commercial Bank	8/3/2005	XS0224123538	MCN	00.00	N/A	00'0	N/A	00'0	N/A
	Bank Hapoalim	9/26/2006	16705ECD3	MCN	0.00	N/A	0.00	N/A	0.00	N/A
[3]	Bank SinoPac	10/3/2005	xs0230885500	MCN	00:00	N/A	00:00	N/A	00:00	N/A
4	Butterfield	7/7/2006	16705EBY8	NTM	220,486.00	BTFDe0002764	0.00	N/A - Gryphon	106,556.72	Workpaper MG-34
[5]	Butterfield	5/14/2007	16705MYD1	පි	244,539.00	BTFDe0002764	0:00	N/A - Gryphon	142,665.26	Workpaper MG-50
	Commerzbank	12/4/2006	16705EDH3	MCN	0.00	CB0000005	0.00	CB0000005	0.00	CB0000005
	Commerzbank	4/16/2007	16705EET6	MTM	174,964.94	CB0000002	00:00	CB0000002	84,834.77	CB0000002
[8]	Commerzbank	6/5/2007	16705EFD0	MTN	88,074.68	CB0000003	0.00	CB0000003	42,715.88	CB0000003
[6]	Commerzbank	5/15/2007	16705RAY0	CP	159,256.88	CB0000001	0.00	CB0000001	77,259.49	CB0000001
[10]	Deutsche Postbank	12/20/2006	XS0280223289	MCN	0.00	N/A	00:00	N/A	00.00	N/A
Ξ	Deutsche Postbank	12/22/2005	XS0239377350	MCN	0.00	N/A	00:00	N/A	00.00	N/A
[12]	Deutsche Postbank	2/20/2007	XS0280223875	MCN	0.00	N/A	0.00	N/A	00.00	N/A
[13]	Florida State Board of Administration	2/1/2006	16705EAU7	MTN	88,220.32	Workpaper MG-34	00:00	N/A - Gryphon	42,762.72	Workpaper MG-34
[14]	Florida State Board of Administration	2/10/2006	16705EAV5	MTM	87,963.82	Workpaper MG-34	00:00	N/A - Gryphon	42,633.46	Workpaper MG-34
[15]	Gulf International Bank	8/3/2005	xs0224123538	MCN	0.00	N/A	00:0	N/A	0.00	N/A
[16]	King County, Washington	4/18/2007	16705RBC7	CP	245,250.98	KCe0000259	753,088.10	KCe0000896	143,070.09	KCe0013713
[17]	National Agricultural Cooperative Federation	8/3/2005	xs0224122563	MCN	0.00	N/A	00:00	N/A	00.00	N/A
[18]	Global Investment Services Ltd. (New Zealand)	8/3/2005	xs0224125236	MCN	0.00	N/A	0.00	N/A	0.00	N/A
[19]	Global Investment Services Ltd. (New Zealand)	1/23/2007	xs0283817434	MCN	0.00	N/A	0.00	N/A	00.00	N/A
					d	PSERSe0000617, pg. 4; See	PS	PSERSe0000617, pg. 4;	PS	PSERSe0000617, pg. 3; See
[20]	Pennsylvania Public School Employee Retirement Syster	5/21/2007	16705EFB4	MTM	41,136.66	Workpaper MG-34	109,844.00	Workpaper MG-34	20,413.96	Workpaper MG-34.
[21]	SEI Investments Co	10/25/2006	16705ECW1	MTM	173,357.00	SEI0011309	0.00	N/A - Gryphon	83,632.37	Workpaper MG-34
	SEI Investments Co	1/25/2007	16705EDU4	MTN	432,454.00	SEI0011309	0.00	N/A - Gryphon	208,510.60	Workpaper MG-34
	SEI Investments Co	3/26/2007	16705EEMI	MTM	332,305.00	SEI0011309	0.00	N/A - Gryphon	160,200.33	Workpaper MG-34
[24]	SEI Investments Co	5/15/2007	16705EEZ2	MTN	34,350.00	SEI0011309	0.00	N/A - Gryphon	16,518.82	Workpaper MG-34
[25]	SEI Straegies LLC	3/20/2007	16705EEJ8	MTM	175,550.40	Workpaper MG-34, SEI0011311	0.00	N/A - Gryphon	85,118.62	Workpaper MG-34
[26]	SEI Straceries LLC	6/20/2007	16705EFF5	XLL	175.774.33	Workpaper MG-34, SEI0011311	000	N/A - Grvohon	85.249.93	Workpaper MG-34
[27]	SFT Collective Investment Fund	4/4/2007	16705EEQ2	MTM	175,434.51	Workpaper MG-34	00:0	N/A - Gryphon	85,096.40	ESEC0000263
	SFT Collective Investment Fund	4/20/2007	16705EEV1	NIIW	177,437.27	Workpaper MG-34	0.00	N/A - Gryphon	86,067.80	ESEC0000263

Workpaper MG-32 Transaction Details (\$)

Plaintiff [a]	Date of Purchase [b]	Security Purchased [c]	Rating at issue (Moody/S&P) [d]	Face Value of Note [e]	Purchase Price of Note [f]	CUSIP [g]	After liquidation, did this firm take the cash or Gryphon Notes? [h]
[1] Abu Dhabi Commercial Bank	8/3/2005	MCN	A3/A	10,000,000	10,000,000 XS	XS0224123538	N/A
[2] Bank Hapoalim	9/29/2006	MCN	A3/A	10,000,000	10,000,000 167	16705ECD3	N/A
[3] Bank SinoPac	10/3/2005	MCN	Baa3/BBB	4,290,000	4,290,000 xs0	xs0230885500	N/A
[4] Butterfield	7/7/2006	MTM	Aaa/AAA	50,000,000	49,963,750 167	16705EBY8	Gryphon
[5] Butterfield	5/14/2007	CP	P-1/A-1+	50,000,000	48,687,014 167	16705MYD1	Gryphon
[6] Commerzbank	12/4/2006	MCN	A3/A	000,000,000	60,000,000 167	16705EDH3	N/A
[7] Commerzbank - DAF	4/16/2007	MTM	Aaa/AAA	50,000,000	49,990,000 167	16705EET6	Gryphon
[8] Commerzbank - DAF	6/5/2007	MTM	Aaa/AAA	25,000,000	24,996,250 167	16705EFD0	Gryphon
[9] Commerzbank - DAF	5/15/2007	CP	P-1/A-1+	45,000,000	44,996,402 167	16705RAY0	Gryphon
[10] Deutsche Postbank	12/20/2006	MCN	A3/A	20,000,000	20,000,000 XS	XS0280223289	N/A
[11] Deutsche Postbank	12/22/2005	MCN	A3/A	17,500,000	17,500,000 XS	XS0239377350	N/A
[12] Deutsche Postbank	2/20/2007	MCN	A3/A	20,000,000	20,000,000 XS	XS0280223875	N/A
[13] Florida State Board of Administration	2/1/2006	MTM	Aaa/AAA	25,000,000	24,982,703 167	16705EAU7	Gryphon
[14] Florida State Board of Administration	2/10/2006	MTM	Aaa/AAA	25,000,000	24,980,635 167	16705EAV5	Gryphon
[15] Gulf International Bank	8/3/2005	MCN	A3/A	15,000,000	15,000,000 xs0	xs0224123538	N/A
[16] King County, Washington	4/18/2007	CP	P-1/A-1+	50,000,000	48,688,083 167	16705RBC7	Cash
[17] National Agricultural Cooperative Federation	8/3/2005	MCN	A3/A	10,000,000	10,000,000 xs0	xs0224122563	N/A
[18] Global Investment Services Ltd. (New Zealand)	8/3/2005	MCN	Baa2/NR	1,690,000	1,690,000 xs0	xs0224125236	N/A
[19] Global Investment Services Ltd. (New Zealand)	1/23/2007	MCN	A3/A	2,000,000	2,000,000 xs0	xs0283817434	N/A
[20] Pennsylvania Public School Employee Retirement System	5/21/2007	MTN	Aaa/AAA	10,000,000	9,998,039 167	16705EFB4	Cash
[21] SEI Investments Co	10/25/2006	MTM	Aaa/AAA	50,000,000	49,995,000 167	16705ECW1	Gryphon
[22] SEI Investments Co	1/25/2007	MTM	Aaa/AAA	125,000,000	124,969,450 167	16705EDU4	Gryphon
[23] SEI Investments Co	3/26/2007	MTM	Aaa/AAA	97,000,000	96,973,849 167	16705EEM1	Gryphon
[24] SEI Investments Co	5/15/2007	MTM	Aaa/AAA	10,000,000	9,997,549 167	16705EEZ2	Gryphon
[25] SEI Straegies LLC	3/20/2007	MTM	Aaa/AAA	50,000,000	49,990,610 167	16705EEJ8	Gryphon
[26] SEI Straegies LLC	6/20/2007	MTM	Aaa/AAA	50,000,000	49,992,625 167	16705EFF5	Gryphon
[27] SFT Collective Investment Fund	4/4/2007	MTM	Aaa/AAA	50,000,000	49,965,455 167	16705EEQ2	Gryphon
[28] SFT Collective Investment Fund	4/20/2007	MTM	Aaa/AAA	50,000,000	49,965,550 167	16705EEV1	Gryphon

Notes & Sources: See separate page.

#### Workpaper MG-32 (Continued) Transaction Details Sources

	Plaintiff [a]	Date of Purchase (settlement date used) [b]	Security Purchased (used abbrev.) [c]	Rating at time of purchase (Moody/S&P) [d]	Face Value of Note	Purchase Price of Note [f]	CUSIP/SIN [g]
[1]	Abu Dhabi Commercial Bank	Bloomberg, 8/29/11	Bloomberg, 8/29/11	ADCB00000926	ADCB00000921	ADCB00000921	Bloomberg, 8/29/11
[2]	Bank Hapoalim	BHAe0019442	BHAe0027060	MS_000051811 & MDYS ADCB 084921	BHAe0027060-65	BHAe0027060-65	BHAe0027061
[3]	Bank SinoPac	SNPC0000468	SPe00000180	MS_000051811 & MDYS ADCB 084921	SNPC0000468, SPe00000180	SNPC0000468, SPe00000180	SNPC0000468
[4]	Butterfield	BTRFLD000009-10	BTRFLD000009-10	MS_000051811 & MDYS ADCB 084921	BTRFLD000009-10	BTRFLD000009- 10	BTRFLD000009- 10
[5]	Butterfield (this purchase happened in two transactions of 25 million on May 14th and 15th)	BTRFLD0000022	BTRFLD000009-10	BTRFLD000009-10	BTRFLD000009-10	BTRFLD000009- 10	BTRFLD000009- 10
[6]	Commerzbank	CBe00278163	CBe00278163	CBe00278163	CBe00278163	CBe00278163	CBe00278163
[7]	Commerzbank - DAF	Bloomberg, 8/27/12	CBe00025721-27	MS_000051811 & MDYS ADCB 084921	CBe00025721-27	CBE00009622	CBe00025721-27
[8]	Commerzbank - DAF	Bloomberg, 8/27/12	CBe00025721-27	MS_000051811 & MDYS ADCB 084921	CBe00025721-27	CBE00009622	CBe00025721-27
[9]	Commerzbank - DAF	CBe00025727	CBe00025721-27	MS_000051811 & MDYS ADCB 084921	CBe00025721-27	CBE00009622	CBe00025721-27
[10]	Deutsche Postbank	Bloomberg, 9/9/09	Bloomberg, 9/9/09	MS_000051811 & MDYS ADCB 084921	PBe00000045	Bloomberg, 8/27/12	PBe00000045
[11]	Deutsche Postbank	Bloomberg, 10/10/11	Bloomberg, 10/10/11	MS_000051811 & MDYS ADCB 084921	Bloomberg, 10/10/11	Bloomberg, 10/10/11	Bloomberg, 10/10/11
[12]	Deutsche Postbank	Bloomberg, 9/9/09	Bloomberg, 9/9/09	MS_000051811 & MDYS ADCB 084921	Bloomberg, 9/9/09	Bloomberg, 8/27/12	Bloomberg, 9/9/09
[13]	Florida State Board of Administration	FSBA0000001	Bloomberg, 10/6/11	MS_000051811 & MDYS ADCB 084921	FSBA0000001	FSBA0000001	Bloomberg, 10/6/11
[14]	Florida State Board of Administration	FSBA0000001	Bloomberg, 10/6/11	MS_000051811 & MDYS ADCB 084921	FSBA0000001	FSBA0000001	Bloomberg, 10/6/11
[15]	Gulf International Bank	Bloomberg, 8/22/11	Bloomberg, 8/22/11	MS_000051811 & MDYS ADCB 084921	Bloomberg, 8/22/11	Per Other MCN, Purchase Price - Face Value	Bloomberg, 8/22/11
[16]	King County, Washington	KC00000573	KC00000574	KC00000573	KC00000573	KC00000573	KC00000896
	National Agricultural Cooperative Federation	NACF0000001	NACF0000001	MDYS ADCB 084921	NACF0000001	Per Other MCN, Purchase Price - Face Value	NACF0000001
	Global Investment Services Ltd. (New Zealand) Global Investment Services Ltd. (New Zealand)	NZe0000003-1 Bloomberg, 11/15/11	NZe0000003-1 Bloomberg, 11/15/11	NZe0000003-1 MS_000051811 & MDYS ADCB 084921	NZe0000003-1 Bloomberg, 11/15/11	NZe0000003-1 Per Other MCN, Purchase Price - Face Value	NZe0000003-1 Bloomberg, 11/15/11
[20]	Pennsylvania Public School Employee Retirement System	PSERS0000001	PSERS0000001	MS_000051811 & MDYS ADCB 084921	PSERS0000001	PSERS0000001	PSERS0000001
[21]	SEI Investments Co	SEI0000008-10, SEI0011309	Bloomberg, 8/27/12	MS_000051811 & MDYS ADCB 084921	SEI11309, SEI0000008	SEI11309, SEI0000008	SEI0000008
[22]	SEI Investments Co	SEI0000008-10, SEI0011309	Bloomberg, 8/27/12	MS_000051811 & MDYS ADCB 084921	SEI11309, SEI0000008	SEI11309, SEI0000008	SEI0000008
[23]	SEI Investments Co	SEI0000008-10, SEI0011309	Bloomberg, 8/27/12	MS_000051811 & MDYS ADCB 084921	SEI11309, SEI0000008	SEI11309, SEI0000008	SEI0000008
[24]	SEI Investments Co	Bloomberg, 8/27/12, SEI0011309	Bloomberg, 8/27/12	MS_000051811 & MDYS ADCB 084921	Bloomberg, 8/27/12	SEI0011309	Bloomberg, 8/27/12
[25]	SEI Straegies LLC	SEI0014523, SEI0000995-98	SEI0014523, SEI0000995-98	MS_000051811 & MDYS ADCB 084921	SEI0014523	SEI0014523	SEI0014523
[26]	SEI Straegies LLC	SEI0014578, SEI0000999-1002	SEI0014578, SEI0000999-1002	MS_000051811 & MDYS ADCB 084921	SEI0014578, SEI0000999-1002	SEI0014578, SEI0000999-1002	SEI0014578, SEI0000999-1002
[27]	SFT Collective Investment Fund	ESEC0000257	Bloomberg, 8/27/12	MS_000051811 & MDYS ADCB 084921	ESEC0000257	ESEC0000257	ESEC0000257
[28]	SFT Collective Investment Fund	ESEC0000262	Bloomberg, 8/27/12	MS_000051811 & MDYS ADCB 084921	ESEC0000262	ESEC0000262	ESEC0000262

Notes See Declaration of Plaintiff's Regarding Damages in Support of Plaintiff's Opposition to Defendants' Joint Motion for Summary Judgment Pursuant to Federal Rule of Civil Procedure 56 (c), pg. 1 for whether plaintiff took Gryphon Notes.

Workpaper MG-33 Post Default Principal Distributions as Calculated

							April Principal					
	Plaintíf	Date of Purchase	CUSIP	Security Purchased Face Value of Note (\$)	ace Value of Note (\$)	Purchase Price of Note(\$)	(Amount Per \$1,000)	April Principal (Total \$)	July Principal (Amount Per \$1,000)	July Principal (Total \$)	August Principal (Amount Per \$1,000)	August Principal (Total \$)
	[a]	[p]	[c]	[p]	[e]	[4]	[8]	[h]	[i]	[i]	[k]	[1]
Ξ	Abu Dhabi Commercial Bank	8/3/2005	XS0224123538	MCN	10,000,000	10,000,000		•				
[2]	Bank Hapoalim	9/26/2006	16705ECD3	MCN	10,000,000	10,000,000						
[3]	Bank SinoPac	10/3/2005	xs0230885500	MCN	4,290,000	4,290,000		•				
4	Butterfield	7/7/2006	16705EBY8	MTM	50,000,000	49,963,750	183.1722120	9,158,611	364.8958585	18,244,793	64.4695621	3,223,478
[5]	Butterfield	5/14/2007	16705MYD1	Cb	50,000,000	48,687,014						
[9]	Commerzbank	12/4/2006	16705EDH3	MCN	000,000,000	000,000,000						
	Commerzbank	4/16/2007	16705EET6	NTM	50,000,000	49,990,000	182.6905556	9,134,528	363.9363533	18,196,818	64.3000366	3,215,002
[8]	Commerzbank	6/5/2007	16705EFD0	MTM	25,000,000	24,996,250	183.6861980	4,592,155	365.9197677	9,147,994	64.6504642	1,616,262
[6]	Commerzbank	5/15/2007	16705RAY0	Cb	45,000,000	44,996,402	184.2817989	8,292,681	367.1062569	16,519,782	64.8600936	2,918,704
[10]	Deutsche Postbank	12/20/2006	XS0280223289	MCN	20,000,000	20,000,000						
Ξ	Deutsche Postbank	12/22/2005	XS0239377350	MCN	17,500,000	17,500,000						
[12]	Deutsche Postbank	2/20/2007	XS0280223875	MCN	20,000,000	20,000,000						
[13]	Florida State Board of Administration	2/1/2006	16705EAU7	NTM	25,000,000	24,982,703	184.9793010	4,624,483	368.4957419	9,212,394	65.1055876	1,627,640
[14]	Florida State Board of Administration	2/10/2006	16705EAV5	MTN	25,000,000	24,980,635	184.5630804	4,614,077	367.6665923	9,191,665	64.9590955	1,623,977
[15]	Gulf International Bank	8/3/2005	xs0224123538	MCN	15,000,000	15,000,000						
[16]	King County, Washington	4/18/2007	16705RBC7	ð	50,000,000	48,688,083	182.5000000	9,125,000	363.5567511	18,177,838	64.2329685	3,211,648
[17]	National Agricultural Cooperative Federation	8/3/2005	xs0224122563	MCN	10,000,000	10,000,000						
[18]	Global Investment Services Ltd. (New Zealand)	8/3/2005	xs0224125236	MCN	1,690,000	1,690,000						
[19]	Global Investment Services Ltd. (New Zealand)	1/23/2007	xs0283817434	MCN	2,000,000	2,000,000						
[20]	Pennsylvania Public School Employee Retirement System	5/21/2007	16705EFB4	MTN	10,000,000	6,998,039	184.7005189	1,847,005	367.9403873	3,679,404	65.0074678	650,075
[21]	SEI Investments Co	10/25/2006	16705ECW1	MTN	50,000,000	49,995,000	184.7569537	9,237,848	368.0528119	18,402,641	65.0273311	3,251,367
[22]	SEI Investments Co	1/25/2007	16705EDU4	MTN	125,000,000	124,969,450	184.8518353	23,106,479	368.2418236	46,030,228	65.0607251	8,132,591
[23]	SEI Investments Co	3/26/2007	16705EEM1	MTN	97,000,000	96,973,849	183.1683506	17,767,330	364.8881649	35,394,152	64.4682037	6,253,416
[24]	SEI Investments Co	5/15/2007	16705EEZ2	MTN	10,000,000	9,997,549	183.5334821	1,835,335	365.6155408	3,656,155	64.5967154	645,967
[25]	SEI Straegies LLC	3/20/2007	16705EEJ8	MTN	50,000,000	49,990,610	183.3018928	9,165,095	365.1541950	18,257,710	64.5152044	3,225,760
[26]	SEI Straegies LLC	6/20/2007	16705EFF5	MTN	50,000,000	49,992,625	183.2951088	9,164,755	365.1406845	18,257,034	64.5128187	3,225,641
[27]	SFT Collective Investment Fund	4/4/2007	16705EEQ2	MTN	50,000,000	49,965,455	182.8209896	9,141,049	364.1961930	18,209,810	64.3459477	3,217,297
[28]	SFT Collective Investment Fund	4/20/2007	16705EEV1	MTN	50,000,000	49,965,550	184.9080314	9,245,402	368.3537702	18,417,689	65.0805025	3,254,025

Notes & Sources:

[a]-[f]: See Workpaper MG-32.

[b]: A pril 14, 2008 Portfolio Receivership Report; CMA0017174-77.

[b]: [e] x [g].

[j]: [e] x [g].

[j]: [e] x [j].

[k]: August 12, 2008 Portfolio Receiver Report; MS\_000822760-66.

[j]: [e] x [k].

Workpaper MG-34
Post Default Income Distributions as Calculated

CUSIP         Security Purchased Face Value of Note (s)         (s)         S1,000)         (Total S)         (Amount Per S1,000)         (Total S)           1 CONDERNA         MCN         10,000,000         10,000,000         10,000,000         - <td< th=""><th></th><th></th><th>Doto of</th><th></th><th></th><th>onid</th><th>Purchasa Prica of Note</th><th>April Interest</th><th>Anvil Interest</th><th>Into Interest</th><th>Inly Interest</th><th>Annet Interest</th><th>August Interest</th></td<>			Doto of			onid	Purchasa Prica of Note	April Interest	Anvil Interest	Into Interest	Inly Interest	Annet Interest	August Interest
Part   Part		Plaintiff	Purchase	CUSIP	Security Purchase		(\$)	\$1,000)		(Amount Per \$1,000)	(Total \$)	(Amount Per \$1,000)	(Total \$)
Aby Dhibly Commercial Bank         S A 2005         S NECTOR         NCK         10000,000         1,0000,000         -         -         -         -           Bank Impoulm         9.02.004         10.70         1,0000,000         1,9000,000         -         -         -         -           Bank Impoulm         9.02.004         1,0000,000         4,900,000         4,900,000         -         -         -         -           Bank Impoulm         1,12,200         1,000,000         4,900,000         4,900,000         -         -         -         -         -           Commerchank         1,12,200         1,000,000         4,900,000         4,900,000         4,900,000         3,500,000         4,57,402         5,73,700           Commerchank         1,12,200         1,000,000         1,000,000         4,900,000         3,500,000         4,57,402         5,73,70         5,73,70           Commerchank         1,12,200         1,000,000         1,000,000         4,900,000         4,900,000         3,500,000         5,73,70         5,73,70         5,73,70         5,73,70         5,73,70         5,73,70         5,73,70         5,73,70         5,73,70         5,73,70         5,70,70         5,70,70         5,70,70         5,70,70<		[8]	[P]	[c]	[p]	[e]	[1]	[8]	[h]	[i]	[]	[k]	[1]
Ab Disposition of Application of Applicatio													
Bank Hapolina         926/2004         17/2006	Ξ	Abu Dhabi Commercial Bank	8/3/2005	XS0224123538	MCN	10,000,000	10,000,000		•				
Butterfield         10/3-2018         MCN         4-290,000         4-	[2]	Bank Hapoalim	9/26/2006	16705ECD3	MCN	10,000,000	10,000,000						
Butterfield         77,7006         1,07,2006         49,943,750         44,97162         20,486         11,4744025         57,720           Commerchank         1,24,2006         1,07,2006         60,000,000         48,627,90         17,474025         17,720	[3]	Bank SinoPac	10/3/2005	xs0230885500	MCN	4,290,000	4,290,000				•		
Butterfield         Commerfield         CP 6000000         60000000         60000000         60000000         6000000         6000000 </th <th>4</th> <td>Butterfield</td> <td>7/7/2006</td> <td>16705EBY8</td> <td>NTM</td> <td>50,000,000</td> <td>49,963,750</td> <td>4.4097182</td> <td>220,486</td> <td>11.4744025</td> <td>573,720</td> <td>2.1311343</td> <td>106,557</td>	4	Butterfield	7/7/2006	16705EBY8	NTM	50,000,000	49,963,750	4.4097182	220,486	11.4744025	573,720	2.1311343	106,557
Commerchank         124 200         16701DH         ICVIDIDH         ICVID         60000 000         3.4990,000         1.4990,000         1.4990,000         1.4990,000         1.4990,000         1.4990,000         1.4990,000         1.4990,000         1.4990,000         1.4990,000         1.4990,000         1.4990,230         1.580,84         1.490,230         1.490,230           Commerchank         6.52,007         1670,6EPD         MTN         2.5000,000         2.490,520         3.529,67         9.21,0789         2.30,32           Dougles Postbank         12,220,2005         XXX230,232,38         MCN         17,500,000         2.000,000         1.500,000	[5]	Butterfield	5/14/2007	16705MYD1	Cb	20,000,000	48,687,014						•
Commerchanik         416,5007         1670SEEF0         MTM         \$50,000         4999,000         14,990,280         174,965         914,68184         457,412           Commerchanik         \$15,200         1670SEEF0         MTN         25,000,000         24,996,250         35,52087         91,20789         29,03.02           Commerchanik         \$15,200         1670SEA70         GF,000         CO,000,000         20,000,000	[9]	Commerzbank	12/4/2006	16705EDH3	MCN	000'000'99	000,000,009						
Commerchank         6 S C 2007         16 T OKEPDO         MTM         25 000 000         24 996, 250         3 529872         8 K V 73         9 210789         29 302           Commerchank         L 20 Commerchank         12 20 2000         CRA         45 000 000         24 90 000         3 539418         159,257         9 251079         16 528           Describer Portunic         12 20 2006         X S00 29 27373         MCN         20 000 000		Commerzbank	4/16/2007	16705EET6	NTM	50,000,000	49,990,000	3.4992988	174,965	9.1480484	457,402	1.6966954	84,835
Commerchank         515/2007         16/80/EAV         CP         45,000,000         4906,402         3539418         159,257         9.256(771)         416,528           Deutsche Petralist         12020.006         XSD2937336         MCN         20,000,000         70,000         -         -         -         -           Deutsche Petralist         12020.007         XSD2347336         MCN         17,000         70,000         -         -         -         -         -           Deutsche Petralist         2,020.007         XSD23473         MCN         20,000,000         20,000         - <th>[8]</th> <td>Commerzbank</td> <td>6/5/2007</td> <td>16705EFD0</td> <td>NTM</td> <td>25,000,000</td> <td>24,996,250</td> <td>3.5229872</td> <td>88,075</td> <td>9.2120789</td> <td>230,302</td> <td>1.7086351</td> <td>42,716</td>	[8]	Commerzbank	6/5/2007	16705EFD0	NTM	25,000,000	24,996,250	3.5229872	88,075	9.2120789	230,302	1.7086351	42,716
Deutsche Posthank         12202006         X80239223389         MCN         20000000         2000000         -         -         -         -           Deutsche Posthank         12202006         X80239237389         MCN         17,500,000         20,000,000         -         -         -         -         -           Deutsche Posthank         20,2000         X8023923735         MCN         20,000,000         2	[6]	Commerzbank	5/15/2007	16705RAY0	C <sub>P</sub>	45,000,000	44,996,402	3.5390418	159,257	9.2561771	416,528	1.7168775	77,259
Denusche Postbank         12222005         XSO39337750         MCN         17500000         20000000         -         -         -         -           Fordish Postbank         2202007         XSO39237755         MCN         20000000         20000000         -         -         -         -           Fordish Postbank         21/02006         16705EAU7         MTN         25,0000         24,986,035         3,518526         87,204         9,1900031         290,730           Fordish Ebund of Administration         21/102006         16705EAU7         MTN         25,000,000         24,986,035         3,518526         87,204         9,1900031         299,730           Gull International Bank         41/18 2007         16705EAU2         MTN         15,000,000         1,600 <td< th=""><th>[10]</th><td>Deutsche Postbank</td><td>12/20/2006</td><td>XS0280223289</td><td>MCN</td><td>20,000,000</td><td>20,000,000</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	[10]	Deutsche Postbank	12/20/2006	XS0280223289	MCN	20,000,000	20,000,000						
Deutsche Postbank         2,02,0207         XSDS8023875         MCN         2,000,000         2,000,000         3,5288126         88,220         9,217860         2,004,70           Fords aste Board of Administration         2,17,2006         1,702,006         1,5000,000         24,982,733         3,5288126         88,220         9,2178691         2,904,47           Fords Bare Board of Administration         87,2005         1,702,006         1,702,006         1,5000,000         15,000,000         1,500,000         24,980,535         3,518,525         87,964         9,190,031         2,97,50           Autificational Bank         41,82,2007         1,670,8REC         CP         5,000,000         15,000,000         4,980,633         4,960,106         1,175	[11]	Deutsche Postbank	12/22/2005	XS0239377350	MCN	17,500,000	17,500,000	,					•
Florida State Board of Administration         2/1/2006         1670SEAU7         MTN         25,000,000         24,982,703         3.5288126         88,220         9.2178691         230,447           Florida State Board of Administration         2/1/2006         1670SEAU7         MTN         5,000,000         24,982,703         3.518526         87,204         9.190031         29,750           Gulf International Bank full functional Agricultural Cooperative Federation         87,2005         16,000,000         15,000,000         49,050196         24,5,251         15,00731         29,750           National Agricultural Cooperative Federation         87,2005         x80,224122543         MCN         10,000,000         16,00,000         -         -         -         -           Global Investment Services Ltd. (New Zealand)         12,32007         x80,224122546         MCN         10,000,000         2,000,000         - <th>[12]</th> <td>Deutsche Postbank</td> <td>2/20/2007</td> <td>XS0280223875</td> <td>MCN</td> <td>20,000,000</td> <td>20,000,000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	[12]	Deutsche Postbank	2/20/2007	XS0280223875	MCN	20,000,000	20,000,000						
Florida State Board of Administration         2100006         1670EAVS         MTN         25000,000         24980,635         3.518556         87,964         9.190031         229,730           Gulffunnestrational Bank         83,2005         x8024122548         MCN         10,000,000         1,0000         -         -         -         -           Ring County, abbilling on Anticonal Agricultural Cooperative Federation         87,2005         x8024122563         MCN         10,000,000         -         -         -         -           Global Investment Services Ld. (New Zealand)         87,2005         x8022412256         MCN         1,000,000         -	[13]		2/1/2006	16705EAU7	NTM	25,000,000	24,982,703	3.5288126	88,220	9.2178691	230,447	1.7105086	42,763
Gulf International Bank         8/3/2005         xs02412353         MCN         15,000,000         4,68,883         4,9050196         -         -         -           King County, Washington         4/18,207         16/705RBC7         CP         5,000,000         4,688,883         4,9050196         245,231         15,001626         753,088           National Apperature Techeration         8/3/2005         xs024122356         MCN         1,690,000         -         -         -         -           Global Investment Services Ldd. (New Zealand)         17,32007         xs028317434         MCN         1,690,000         -	[14]	_	2/10/2006	16705EAV5	MTM	25,000,000	24,980,635	3.5185526	87,964	9.1900031	229,750	1.7053382	42,633
King County, Washington         47/18/2007         167/05/RBC7         CP         50,000,000         48,688,183         4.9050196         245,251         15.0617626         733,088           National Agricultural Cooperative Federation         83/32005         x80224122366         MCN         1,690,000         -	[15]	Gulf International Bank	8/3/2005	xs0224123538	MCN	15,000,000	15,000,000	,					•
Obsidity Problement Spring Stratement System         88,72005         x80224122563         MCN         10,000,000         -	[16]		4/18/2007	16705RBC7	C)	50,000,000	48,688,083	4.9050196	245,251	15.0617626	753,088	2.8614017	143,070
Global Investment Services Idd (New Zealand)         87,2005         xs022412235         MCN         1,690,000         1,690,000         -	[17]	National Agricultural Cooperative Federation	8/3/2005	xs0224122563	MCN	10,000,000	10,000,000						
Obball Investment Services Ltd. (New Zealand)         1.232007         xs0283817434         MCN         2,000,000         -         -         -         -         -           Pennsylvania Public School Employee Retirement System         5712007         16705EBH4         MTN         1,0000,000         9,998,039         4,113656         1,137         10,9844         3,41084           SEI Investments Co         10,252007         16705EBH4         MTN         126,000,000         1,49,995,000         3,4671441         13,337         9,0216374         451,082           SEI Investments Co         37,62007         16705EBH         MTN         97,000,000         9,997,349         3,428207         33,236         8,9087192         864,146           SEI Investments Co         37,62007         16705EBH         MTN         97,000,000         9,997,349         3,419566         3,43956         3,43956         3,43956         3,43851         864,146           SEI Investments Co         37,62007         16705EBH         MTN         50,000,000         9,997,349         3,51086         17,86539         4,136           SEI Rinegies LLC         37,62007         16705EBH2         MTN         50,000,000         49,990,610         3,511866         175,474         9,192469         459,623	[18]	Ĭ	8/3/2005	xs0224125236	MCN	1,690,000	1,690,000						
Pomosylvania Public School Employee Retirement System         5/21/2007         16/70StFR94         MTN         10,000,000         9998,039         4 113666         4 1,137         10 9844007         10 9844           SEI Investments Co.         10/25/2006         16/70StEML         MTN         50,000,000         49,995,000         34,67441         173,337         9 0206374         451,082           SEI Investments Co.         3/26/2007         16/70StEML         MTN         9/7000,000         9,997,549         3,45956         8 903739         1,134,717           SEI Investments Co.         3/26/2007         16/70StEML         MTN         9/7000,000         9,997,549         3,44956         8 903792         8 64,146           SEI Investments Co.         3/26/2007         16/70StEML         MTN         9/0000,000         9,997,549         3,44956         8 933561         8 64,146           SEI Investments Co.         3/26/2007         16/70StEML         MTN         50,000,000         9,997,549         3,44956         9,4356         8 933561         8 69,146           SEI Investments Co.         3/26/2007         16/70StEML         MTN         50,000,000         9,997,549         3,44956         9,178639         458,933           SEI Collective Investment Fund         4/4/2007	[11]	Ŭ	1/23/2007	xs0283817434	MCN	2,000,000	2,000,000						
SEI Investments Cohere (10.55.200)         10.55.2000         10.75.200         10.75.300         10.75.300         49.995,000         3.4571441         173.357         9.0216374         451,082           SEI Investments Cohere (20.2000)         17.52.000         17.52.000         17.500,000         17.500,000         17.53.00	[20]	Γ	5/21/2007	16705EFB4	NTM	10,000,000	6,998,039	4.1136656	41,137	10.9844007	109,844	2.0413969	20,414
SEI Investments Co         1/25/2007         16705EDU4         MTN         125,000,000         124,969,450         3.4596306         432,454         8.9977339         1,124/717           SEI Investments Co         3/15/2007         16705EBM1         MTN         10,000,000         9,997,549         3.439566         34,350         8,9987192         84,144           SEI Investments Co         3/15/2007         16705EBM2         MTN         10,000,000         9,997,549         3.439566         34,350         8,933561         864,146           SEI Stinegies LLC         6/20/2007         16705EBM2         MTN         50,000,000         49,990,610         3.5134866         175,774         9,192469         489,933           SFT Collective Investment Fund         4/4/2007         16705EBQ         MTN         50,000,000         49,965,455         3.568902         175,474         9,192469         459,623           SFT Collective Investment Fund         4/4/2007         16705EBQ         MTN         50,000,000         49,965,455         3.5487454         177,437         9,2804943         464,025	[21]	SEI Investments Co	10/25/2006	16705ECW1	NTM	20,000,000	49,995,000	3.4671441	173,357	9.0216374	451,082	1.6726474	83,632
SEI Investments Co         3.726/2007         1670SEEM1         MTN         97,000,000         96,973.849         3.4258.07         332,305         8.9087192         864,146         1           SEI Investments Co         S/15/2007         1670SEEM2         MTN         10,000,000         9.997,349         3.449566         3.44956	[22]	SEI Investments Co	1/25/2007	16705EDU4	NTM	125,000,000	124,969,450	3.4596306	432,454	8.9977339	1,124,717	1.6680848	208,511
SEI Investments Co.         57/52007         1670SEEZA         MTN         10,000,000         9,997,549         3.449566         34,350         8,933611         89,336           SEI Investment SLC         3/202007         1670SEEBA         MTN         50,000,000         49,992,625         3.510080         175,774         9,192469         458,933           SET Collective Investment Fund         4/4/2007         1670SEEQ         MTN         50,000,000         49,965,550         3.51686902         175,745         9,192469         458,787           SFT Collective Investment Fund         4/202007         1670SEEQ         MTN         50,000,000         49,965,550         3.5487454         177,437         9,2804943         464,025	[23]		3/26/2007	16705EEM1	NTM	000,000,000	96,973,849	3.4258207	332,305	8.9087192	864,146	1.6515498	160,200
SEI Strategies LLC         3/20/2007         16705EE18         MTN         50,000,000         49,990,610         3.5110080         175,550         9.1786539         458,933         1           SEI Strategies LLC         6/20/2007         16705EFF5         MTN         50,000,000         49,926,525         3.5154866         175,774         9.1924699         459,623         1           SFT Collective Investment Fund         4/4/2007         16705EFQ2         MTN         50,000,000         49,965,455         3.5086902         175,474         9.1757455         458,787         1           SFT Collective Investment Fund         4/2007         16705EFV1         MTN         50,000,000         49,965,550         3.5487454         177,437         9.2804943         464,025         1	[24]	-	5/15/2007	16705EEZ2	MTM	10,000,000	9,997,549	3.4349566	34,350	8.9335611	89,336	1.6518820	16,519
SEI Strategies LLC         6/20/2007         16705EFF5         MTN         50,000,000         49,92,625         3.5154866         175,774         9.1924669         459,623         1           SFT Collective Investment Fund         44/2007         16705EFQ2         MTN         50,000,000         49,965,455         3.5086902         175,435         9.1757455         458,787         1           SFT Collective Investment Fund         420,2007         16705EEV1         MTN         50,000,000         49,965,550         3.5487454         177,437         9.2804943         464,025         1	[25]		3/20/2007	16705EEJ8	NTM	20,000,000	49,990,610	3.5110080	175,550	9.1786539	458,933	1.7023724	85,119
SFT Collective Investment Fund         4/4/2007         16705EBQ2         MTN         50,000,000         49,965,455         3.5086902         175,435         9,1757455         458,787           SFT Collective Investment Fund         420,2007         16705EEV1         MTN         50,000,000         49,965,550         3.5487454         177,437         9,2804943         464,025	[56]		6/20/2007	16705EFF5	MTN	20,000,000	49,992,625	3.5154866	175,774	9.1924669	459,623	1.7049986	85,250
SFT Collective Investment Fund 420,2007 16705EEV1 MTN 50,000,000 49,965,550 3.5487454 177,437 9,2804943 464,025	[27]		4/4/2007	16705EEQ2	NTM	20,000,000	49,965,455	3.5086902	175,435	9.1757455	458,787	1.7019280	960'58
	[28]		4/20/2007	16705EEV1	MTM	50,000,000	49,965,550	3.5487454	177,437	9.2804943	464,025	1.7213560	890'98

Notes & Sources
[a]-[f]: See Workpuper MG-32.
[b]: April 14, 2008 Portfolio Receivership Report; CMA0017174-77.
[b]: [a x [g].
[f]: July 23, 2008 Portfolio Receiver Report; MS\_000822760-66.
[f]: [a x [f].
[k]: Amgust 12, 2008 Portfolio Receiver Report; CMA00022796-802.
[l]: [c] x [k].

### Workpaper MG-35 Butterfield MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705EBY8 7/7/2006 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$50,000,000 100.37%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$50,184,168 \$9,158,611
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$41,025,557 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$18,244,793 \$573,720
[9] Total Gryphon Exchange \$ Value		\$18,818,513

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-36 Butterfield CP: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705MYD1 5/14/2007 CP
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$50,000,000 99.70%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$49,851,189 \$9,097,842
[5] Unrecovered Obligation at Liquidation (July 23, 2008) [6] (×) Gryphon Exchange (%)		\$40,753,347 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$18,123,736 \$646,118
[9] Total Gryphon Exchange \$ Value		\$18,769,855

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS\_000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-50.
- [9]: [7] + [8].

### Workpaper MG-37 Commerzbank MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705EET6 4/16/2007 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$50,000,000 100.10%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$50,052,207 \$9,134,528
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$40,917,679 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$18,196,818 \$457,402
[9] Total Gryphon Exchange \$ Value		\$18,654,220

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-38 Commerzbank MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$25,000,000 16705EFD0 6/5/2007 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$25,000,000 100.65%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$25,162,493 \$4,592,155
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$20,570,338 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$9,147,994 \$230,302
[9] Total Gryphon Exchange \$ Value		\$9,378,296

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-39 Commerzbank CP: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$45,000,000 16705RAY0 5/15/2007 CP
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$45,000,000 100.98%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$45,439,348 \$8,292,681
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$37,146,667 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$16,519,782 \$416,528
[9] Total Gryphon Exchange \$ Value		\$16,936,310

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-40 Florida State Board of Administration MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$25,000,000 16705EAU7 2/1/2006 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$25,000,000 101.36%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$25,339,630 \$4,624,483
[5] Unrecovered Obligation at Liquidation (July 23, 2008) [6] (×) Gryphon Exchange (%)		\$20,715,148 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$9,212,394 \$230,447
[9] Total Gryphon Exchange \$ Value		\$9,442,840

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

## Workpaper MG-41 Florida State Board of Administration MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$25,000,000 16705EAV5 2/10/2006 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$25,000,000 101.13%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$25,282,614 \$4,614,077
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$20,668,537 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$9,191,665 \$229,750
[9] Total Gryphon Exchange \$ Value		\$9,421,415

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-42 SEI Investments Co MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705ECW1 10/25/2006 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$50,000,000 101.24%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$50,618,344 \$9,237,848
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$41,380,496 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$18,402,641 \$451,082
[9] Total Gryphon Exchange \$ Value		\$18,853,722

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-43 SEI Investments Co MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$125,000,000 16705EDU4 1/25/2007 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$125,000,000 101.29%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$126,610,846 \$23,106,479
[5] Unrecovered Obligation at Liquidation (July 23, 2008) [6] (×) Gryphon Exchange (%)		\$103,504,367 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$46,030,228 \$1,124,717
[9] Total Gryphon Exchange \$ Value		\$47,154,945

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-44 SEI Investments Co MTN: Gryphon Value Calculation

		Face Value: CUSIP: Purchase Date: Security:	\$97,000,000 16705EEM1 3/26/2007 MTN
[1] Face Value Held [2] (×)	Redemption Amount (% of Face)		\$97,000,000 100.37%
[3] Redemption \$ Value [4] (-) Pr	incipal Distribution in April '08		\$97,355,233 \$17,767,330
<ul><li>[5] Unrecovered Obligation at Liquidation</li><li>[6]</li></ul>	on (July 23, 2008) (×) Gryphon Exchange (%)		\$79,587,903 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal</li><li>[8] Gryphon Exchange \$ Value (Interest</li></ul>	*		\$35,394,152 \$864,146
[9] Total Gryphon Exchange \$ Value			\$36,258,298

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-45 SEI Investments Co MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$10,000,000 16705EEZ2 5/15/2007 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$10,000,000 100.57%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$10,056,629 \$1,835,335
[5] Unrecovered Obligation at Liquidation (July 23, 2008) [6] (×) Gryphon Exchange (%)		\$8,221,294 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$3,656,155 \$89,336
[9] Total Gryphon Exchange \$ Value		\$3,745,491

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-46 SEI Straegies LLC MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705EEJ8 3/20/2007 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)	)	\$50,000,000 100.44%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08	3	\$50,219,697 \$9,165,095
[5] Unrecovered Obligation at Liquidation (July 23, 2008) [6] (×) Gryphon Exchange (%)	)	\$41,054,602 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$18,257,710 \$458,933
[9] Total Gryphon Exchange \$ Value		\$18,716,642

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-47 SEI Straegies LLC MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705EFF5 6/20/2007 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$50,000,000 100.44%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$50,217,838 \$9,164,755
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$41,053,083 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$18,257,034 \$459,623
[9] Total Gryphon Exchange \$ Value		\$18,716,657

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-48 SFT Collective Investment Fund MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705EEQ2 4/4/2007 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$50,000,000 100.18%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$50,087,942 \$9,141,049
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$40,946,893 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$18,209,810 \$458,787
[9] Total Gryphon Exchange \$ Value		\$18,668,597

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-49 SFT Collective Investment Fund MTN: Gryphon Value Calculation

	Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705EEV1 4/20/2007 MTN
[1] Face Value Held [2] (×) Redemption Amount (% of Face)		\$50,000,000 101.32%
[3] Redemption \$ Value [4] (-) Principal Distribution in April '08		\$50,659,735 \$9,245,402
<ul> <li>[5] Unrecovered Obligation at Liquidation (July 23, 2008)</li> <li>[6] (×) Gryphon Exchange (%)</li> </ul>		\$41,414,333 44.47%
<ul><li>[7] Gryphon Exchange \$ Value (Principal Portion)</li><li>[8] Gryphon Exchange \$ Value (Interest Portion)</li></ul>		\$18,417,689 \$464,025
[9] Total Gryphon Exchange \$ Value		\$18,881,713

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] x [6].
- [8]: See Workpaper MG-34.
- [9]: [7] + [8].

### Workpaper MG-50 Butterfield CP: August Value Calculation (Principal and Interest) and July Interest Calculation

		Face Value: CUSIP: Purchase Date: Security:	\$50,000,000 16705MYD1 5/14/2007 CP
August	Calculation: Principal		
[1]	Face Value Held		\$50,000,000
[2]	( × ) Redemption Amount (% of Face)		99.70%
[3]	Redemption \$ Value		\$49,851,189
[4]	( - ) Principal Distribution in April '08		\$9,097,842
[5]	Unrecovered Obligation at Liquidation (July 23, 2008)		\$40,753,347
[6]	( - ) Gryphon Exchange Principal Value		\$18,123,736
[7]	Unrecovered Obligation at August Distribution		\$22,629,611
[8]	August Distribution (%)		14.15%
[9]	August Principal Distribution		\$3,202,090
August	Calculation: Interest		
[10]	Total August Payment to Butterfield (CP + MTN)		\$6,674,790
[11]	( - ) Total August Principal Distribution to Butterfield (CP)		\$3,202,090
[12]	( - ) Total August Distribution to Butterfield (MTN)		\$3,223,478
[13]	( - ) Total August Interest Payments to Butterfield (MTN)		\$106,557
[14]	August Interest Distribution		\$142,665
Gryph	on Calculation: Interest Portion		
[15]	April Interest Distribution to Butterfield (CP)		\$244,539
[16]	(x) Average (July Interest \$ Value / April Interest \$ Value )		2.64
[17]	<b>Total Estimated Gryphon Interest Portion</b>		\$646,118

- [1]: See Workpaper MG-32.
- [2]: [4]/ (18.25% x [1]). The post-default Redemption Amount as a percentage of face amount is also reported in SEI0000722-27; The figures on the schedule are rounded to two decimal places, while distributions were determined using a factor to 7 decimal places. Results are shown match values reported in SEI0000722-27.
- [3]: [1] x [2].
- [4]: See Workpaper MG-30.
- [5]: [3] [4].
- [6]: 44.47% x [5]. July 23, 2008 Portfolio Receiver Report; MS 000822760-66.
- [7]: [5] [6].
- [8]: See August 12, 2008 Portfolio Receiver Report; CMA00022796-802.
- [9]: [7] x [8].
- [10]: BTFDe0002764.
- [11]: [9].
- [12]: See Workpaper 33.
- [13]: See Workpaper 34.
- [14]: [10] [11] [12].
- [15]: BTFDe0002764.
- [16]: See Workpaper 34, Average [j]/[h].
- [17]: [15] x [16].

Workpaper MG-51 Calculation of Years/Fraction of Years for Pre-Judgment Interest Determination

I	5.00057		1,827		Total:
	4.17760	0.79235	290	10/17/2012	10/17/2012
		1.00000	365	1/1/2012	
		1.00000	365	1/1/2011	
		1.00000	365	1/1/2010	
	1	0.38525	141	1/1/2009	1
	0.05738	0.05738	21	8/13/2008	8/13/2008
	0.26776	0.26776	86	7/23/2008	7/23/2008
	0.49784	0.28962	106	4/16/2008	4/16/2008
		0.20822	92	1/1/2008	
	1	1	1	10/17/2007	10/17/2007
ı	[5]	[4]	[3]	[2]	[1]
	Year)	Year)	Previous Bookend	Dates Plus Jan 1	Date
	PPD (As Fraction of	Bookend (As Fraction of	Days Since	Principal Payment	Terminal Interest
	Days Since Previous	Days Since Previous			Dates (PPD) and
					Principal Payment
ı					

Notes & Sources:

[1]: CMA0001309; April Portfolio Receiver Report, pg 1, CMA0017174; July Portfoloio Receiver Report, pg. 1 MS\_000822760; and August Portfolio Receiver Report, pg. 2, CMA0022797. October 17, 2012 date as date up to which pre-judgment interest is calculated is per counsel.

[2]: Insert dates for beginning of new calendar years.

[3]: Calculation of days on which interest is received per year. Date in [2] at time (t) less date in [2] at time (t-1).

[4]: [3] / number of days in the year. All years have 365 days, except 2008 and 2012 which have 366.

[5]: Aggregation of [4] between principal payment dates or terminal interest date.